

## **BA History**

### **Program Outcomes (POs)**

- Remember and obtain a wider knowledge of World History, Indian History, Regional History, Archaeology, Tourism, Journalism, and Computer application in History
- Understand the political, social and cultural facets of the world and develop their historical knowledge.
- Apply his knowledge in the field of Politics, Education and Research.
- Analyze the causes for changes in the course of history.
- Evaluate the role of leaders in society
- Create an environment conducive to peaceful co-existence
- Acquire modern skills, aptitude and potentialities of most creative mode in history.
- Worthy intellectual attitude will be developed among students.
- Appreciate the achievements and values of their own times

### **Program Specific Outcomes (PSOs)**

- Learn and understand history with the ability to know the different historical times of world and acquire knowledge of culture, events, facts, terminologies, conventions and methodology.
- Expand their vision to recognize the diversity of human experience in ethnicity, caste, class, religion, sex and make them work towards Universal Brotherhood.
- Equip with the essentialities of their chosen career.
- Acquire the knowledge of world cultures and their inter-connections with multi-cultural sensitivity.
- Recognize and evaluate the achievements of man in history and progress of ideas.
- Develop practical skills which help in the study and understanding of historical events.
- Install the feeling of patriotism in the hearts of the pupils.
- Analyze the relationship between the past and the present is lively presented in the history.
- Evaluate and recognize the values of History
- Equip to appear for competitive Examinations.

## B.A HISTORY

| S.NO               | COURSE  | COURSE OUTCOME   |    |
|--------------------|---|--|----|
| <b>Semester I</b>  |   |  |    |
| 1.                 | <b>Core 1:</b><br>History of India upto 647 A.D                               | On the successful completion of the course, student will be able to:   |    |
| 1                  |   | Recall the basic concepts and distinguish the different sources for the study of Indian History.                               | K1 |
| 2                  |   | Understand the importance of geography for history.  | K2 |
| 3                  |   | Explain the teachings of Buddha and Mahavira.  | K3 |
| 4                  |   | Realize the importance of Unity in Diversity.  | K4 |
| 5                  |   | Evaluate the career of Asoka, Chandragupta, Kanishka, Harsha.  | K5 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| 2.                 | <b>Core 2:</b> History of India from 647 AD to 1526 AD                        | On the successful completion of the course, student will be able to:   |    |
| 1                  |   | Know the Arab Invasion of Sind.  | K1 |
| 2                  |   | Understand the effects of Arab and Turkish invasions.  | K2 |
| 3                  |   | Illustrate the Muslim dynasties that ruled Delhi in the Medieval period.   | K3 |
| 4                  |   | Analyze the social and cultural impact of period.  | K4 |
| 5                  |   | Evaluate and differentiate the various dynasties of Delhi Sultanate.   | K5 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| 3.                 | <b>Allied 1:</b><br>Constitutional History of India From 1773 AD. to 1892 AD. | On the successful completion of the course, student will be able to:   |    |
| 1                  |   | Understand the provisions of Charter Acts.   | K2 |
| 2                  |   | Analyze the Government of India Acts passed by the British government.   | K4 |
| 3                  |   | Learns about the historical evolution of the Indian Constitution.  | K3 |
| 4                  |   | Remember the Queen's Proclamation guaranteed to the Indians.   | K1 |
|                    |   | Know the Indian councils as the law making bodies.   | K3 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| <b>Semester II</b> |   |  |    |
| 4.                 | <b>Core 3:</b> History of India From 1526 AD to 1707 AD                       | On the successful completion of the course, student will be able to:   |    |
| 1                  |   | Remember the important historical developments of mughal rule.   | K1 |
|                    | 2   | Classify and compare the regimes of different dynasties and  | K2 |

|    |  |   |   |    |
|----|--|---|---|----|
|    |  |   | recognize and articulate about the diversity of historical experience.                        |    |
|    |  | 3   | Apply and accept the concept of religious harmony and its significance to India               | K3 |
|    |  | 4   | Analyze the drawbacks of political and religious animosities of the period.                   | K4 |
|    |  | 5   | Evaluate the contributions of Mughals.  | K5 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 5. | <b>Core 4:</b><br>History of India from 1707 AD to 1858 AD               | On the successful completion of the course, student will be able to:                        |   |    |
|    |  | 1   | Remember the British Administrators and their reforms.  | K1 |
|    |  | 2   | Understand the colonial wars and their impact.  | K2 |
|    |  | 3   | Apply the constitutional provisions to understand the present political developments.         | K3 |
|    |  | 4   | Analyze the role of Dalhousie in modernization in India.                                      | K4 |
|    |  | 5   | Evaluate the social reforms and changes in Indian society.                                    | K5 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 6. | <b>Allied 2:</b><br>Constitutional History of India from 1892 to 1950 AD | On the successful completion of the course, student will be able to:                        |   |    |
|    |  | 1   | Describe the constitutional development of India since 1892.                                  | K1 |
|    |  | 2   | Understand the changes in home government, Bicameral legislature and provincial autonomy.     | K2 |
|    |  | 3   | Acquire the knowledge of Government of India act of 1935 as the Federal system of Government. | K3 |
|    |  | 4   | Analyze the proposals of Mount Patten and the impact of partition of India.                   | K4 |
|    |  |   | Recognize the importance of Republican constitution of India                                  | K5 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |

### Semester III

|     |   |  |  |    |
|-----|---|--|--|----|
| 7.  | <b>Core 5:</b> History of India from 1858 A.D to 1947 A.D   | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Remember the historical events after Queen's Proclamation.                 | K1 |
|     |   | 2  | Understand the factors responsible for emergence of Nationalism.           | K2 |
|     |   | 3  | Apply the principles of Ahimsa and Satyagraha.                             | K3 |
|     |   | 4  | Evaluate the importance to Independence.                                   | K5 |
|     |   | 5  | Analyze the impact of Colonialism.   | K4 |
|     |   | <b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create |  |    |
| 8.  | <b>Core 6:</b> History of India from 1947 A.D to 2000A.D    | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | List out the important events after the post Independence period of India. | K1 |
|     |   | 2  | Understand the foreign policy of India.                                    | K2 |
|     |   | 3  | Apply the ideals of national leader towards a better society.              | K3 |
|     |   | 4  | Analyze the economic developments during the congress ministries.          | K4 |
|     |   | 5  | Evaluate the National Front government and Kargil war.                     | K5 |
|     |   | <b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create |  |    |
| 9.  | <b>Allied :</b> Principles of Government                    | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Understand the meaning and different types of constitution.                | K2 |
|     |   | 2  | Gain knowledge about the working of legislature.                           | K3 |
|     |   | 3  | Know the Indian Judicial System.   | K1 |
|     |   | 4  | Realize that all citizens are equal in front of law.                       | K4 |
|     |   | 5  | Evaluate the working of Indian Constitution.                               | K5 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 10. | <b>Skill Based Subject – I</b> Origin and Growth of Tourism | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Know about the meaning and concepts of Tourism.                            | K1 |
|     |   | 2  | Classify the types of tourism.   | K3 |
|     |   | 3  | Understand the establishments of WTO, PATA, ITDC, TTDC etc.,               | K2 |
|     |   | 4  | Analyze the qualities of a Tourist Guide.                                  | K4 |
|     |   | 5  | Evaluate the contribution of tourism to the development of economy.        | K5 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |

### Semester IV

|     |  |  |  |    |
|-----|--|--|--|----|
| 11. | <b>Core 7:</b> History of Tamilnadu upto 1336 A.D              | On the successful completion of the course, student will be able to:   |  |    |
|     |  | 1  | Remember the social and economic development of people from the Sangam Age.                                      | K1 |
|     |  | 2  | Understand and recognize the administration of the Pallavas and art of making sculpture during that period.      | K2 |
|     |  | 3  | Understand the development of art in ancient Tamilagam.  | K2 |
|     |  | 4  | Analyse the impact of Malik Kafur's invasion.  | K3 |
|     |  | 5  | Apply the ideas and culture of Tamils in their life.   | K5 |
|     |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 12. | <b>Core 8:</b> History of Tamilnadu from 1336 A.D to 1977 A.D  | On the successful completion of the course, student will be able to:   |  |    |
|     |  | 1  | Remember the historical events of the period.  | K1 |
|     |  | 2  | Understand the Nayak Rule in Tamil Nadu.   | K2 |
|     |  | 3  | Evaluate the establishment of the British rule in Tamil Nadu and evaluate the role of Tamils in Freedom movement | K5 |
|     |  | 4  | Analyze the rise of various Political Parties and contribution of leaders.                                       | K4 |
|     |  | 5  | Create interest on Art and Literature of Tamil Nadu.   | K6 |
|     |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 13. | <b>Allied :</b> Indian Constitution                            | On the successful completion of the course, student will be able to:   |  |    |
|     |  | 1  | Understand the evolution of Indian Constitution.   | K2 |
|     |  | 2  | Get interest on Politics, voting right, secularism, equality and citizenship.                                    | K5 |
|     |  | 3  | Familiarizes the significance of fundamental rights and duties.  | K1 |
|     |  | 4  | Highlight the powers of state executive.   | K4 |
|     |  | 5  | Acquire knowledge about the functions of Election Commission.  | K3 |
|     |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 14. | <b>Skill Based Subject- II</b> History and Disaster Management | On the successful completion of the course, student will be able to:   |  |    |
|     |  | 1  | Remember the important disasters in history and evolution of Disaster Management in India.                       | K1 |
|     |  | 2  | Understand the social and economic effects of destructions of disasters.   | K2 |
|     |  | 3  | Assess the importance of prevention and preparedness before disasters.   | K3 |
|     |  | 4  | Identify the issues of Global warming, climate change and pollution.   | K4 |
|     |  | 5  | Judge the role of NDMA, SDMA, NDRF, Fire service and Rescue Force and youth during disaster.                     | K5 |

|                   |   |   |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
|-------------------|---|---|---|---|----------|---|---|----------|---|---|----|---|--|----|---|---|----|
|                   |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| <b>Semester V</b> |   |   |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 15.               | <b>Core 9:</b> History of Europe From 1789A.D to 1945 A.D   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Remember about social movements in Europe and the formation of nation states.</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand about the expansion of imperial powers, the process of colonization, and democratic.</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Provide opportunities for debates, discussion in small groups, quiz programs and activities requiring to act out the important European events.</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Analyze the causes for outbreak of the two world wars.</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Evaluate the efforts of UNO in promoting world peace.</td> <td>K5</td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> | 1 | Remember about social movements in Europe and the formation of nation states. | K1       | 2 | Understand about the expansion of imperial powers, the process of colonization, and democratic. | K2       | 3 | Provide opportunities for debates, discussion in small groups, quiz programs and activities requiring to act out the important European events. | K3 | 4 | Analyze the causes for outbreak of the two world wars.     | K4 | 5 | Evaluate the efforts of UNO in promoting world peace. | K5 |
| 1                 | Remember about social movements in Europe and the formation of nation states.   | K1  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 2                 | Understand about the expansion of imperial powers, the process of colonization, and democratic.   | K2  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 3                 | Provide opportunities for debates, discussion in small groups, quiz programs and activities requiring to act out the important European events. | K3  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 4                 | Analyze the causes for outbreak of the two world wars.  | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 5                 | Evaluate the efforts of UNO in promoting world peace.   | K5  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 16.               | <b>Core 10:</b> History of England from 1603 A.D to 1945 A.D  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Gain the knowledge of glorious revolution and its effects.</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand the Constitutional development of England.</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Analyze the importance of development of Cabinet system and it relation with English monarchs.</td> <td>K4</td> </tr> <tr> <td>4</td> <td>Evaluate the impact of Industrial and Agrarian revolution.</td> <td>K5</td> </tr> <tr> <td>5</td> <td>Know the role of England in World Wars.</td> <td>K1</td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>   | 1 | Gain the knowledge of glorious revolution and its effects.                    | K1       | 2 | Understand the Constitutional development of England.   | K2       | 3 | Analyze the importance of development of Cabinet system and it relation with English monarchs.  | K4 | 4 | Evaluate the impact of Industrial and Agrarian revolution. | K5 | 5 | Know the role of England in World Wars.               | K1 |
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| 2                 | Understand the Constitutional development of England.   | K2  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 3                 | Analyze the importance of development of Cabinet system and it relation with English monarchs.  | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 4                 | Evaluate the impact of Industrial and Agrarian revolution.  | K5  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 5                 | Know the role of England in World Wars.   | K1  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 17.               | <b>Core 11:</b> History of USA upto 1865 A.D  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand about the effects of the colonization of USA.</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Analyze the causes and significance of American War of Independence.</td> <td>K4</td> </tr> <tr> <td>3</td> <td>Infer the making of American Constitution.</td> <td>K2</td> </tr> <tr> <td>4</td> <td>Perceive various democratic practices.</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Dissent the system of slavery and racism.</td> <td>K4</td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>  | 1 | Understand about the effects of the colonization of USA.                      | K2       | 2 | Analyze the causes and significance of American War of Independence.                            | K4       | 3 | Infer the making of American Constitution.  | K2 | 4 | Perceive various democratic practices.                     | K4 | 5 | Dissent the system of slavery and racism.             | K4 |
| 1                 | Understand about the effects of the colonization of USA.  | K2  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 2                 | Analyze the causes and significance of American War of Independence.  | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 3                 | Infer the making of American Constitution.  | K2  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 4                 | Perceive various democratic practices.  | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 5                 | Dissent the system of slavery and racism.   | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |
| 18.               | <b>Core 12:</b> India and Her Neighbours  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the features of India’s foreign policy.</td> <td>K2<br/>K5</td> </tr> <tr> <td>2</td> <td>Identify the problems and challenges of India with neighbouring countries.</td> <td>K1<br/>K5</td> </tr> <tr> <td>3</td> <td>Get the knowledge of the role of Indira Gandhi in the liberation of Bangladesh.</td> <td>K4</td> </tr> </table>  | 1 | Understand the features of India’s foreign policy.                            | K2<br>K5 | 2 | Identify the problems and challenges of India with neighbouring countries.                      | K1<br>K5 | 3 | Get the knowledge of the role of Indira Gandhi in the liberation of Bangladesh.   | K4 |   |  |    |   |   |    |
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| 3                 | Get the knowledge of the role of Indira Gandhi in the liberation of Bangladesh.   | K4  |   |   |          |   |   |          |   |   |    |   |  |    |   |   |    |

|                    |  |  |  |    |
|--------------------|--|--|--|----|
|                    |  | 4  | Evaluate the ethnic issues of Sri Lanka.   |    |
|                    |  | 5  | Analyze the role of various organizations in maintaining good relations with neighbouring countries. |    |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 19.                | <b>Elective – I</b><br>Archaeology                                     | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | Understand the importance of Archaeology.  | K2 |
|                    |  | 2  | Apply the method of Exploration and Excavation in their Research.                                    | K3 |
|                    |  | 3  | Analyze the Archaeological Artefacts.  | K4 |
|                    |  | 4  | Remember and Integrate the knowledge of archaeology in studying history.                             | K1 |
|                    |  | 5  | Create more Interest on Archaeological sites of Tamil Nadu.  | K6 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 20.                | <b>Skill Based Subject- III</b><br>Computer Application in History – I | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | Remembers the components of computers.   | K1 |
|                    |  | 2  | Understand the utilization of input and output devices.  | K2 |
|                    |  | 3  | Apply the knowledge of computer in the practical utilization.  | K3 |
|                    |  | 4  | Analyze various tools and operations of Computer.  | K4 |
|                    |  | 5  | Kindle interest on Internet of Things.   | K6 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| <b>Semester IV</b> |  |  |  |    |
| 21.                | <b>Core 13:</b><br>World History from 1945 A.D to 2000A.D              | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | Know the role of UNO in establishing World Peace.  | K1 |
|                    |  | 2  | Understand the nature of the balance of power, regional alliances, the UNO and its achievements.     | K2 |
|                    |  | 3  | Analyze the causes for world wars and conditions of peace.   | K4 |
|                    |  | 4  | Understand the Cold War between capitalist and communist blocks.                                     | K2 |
|                    |  | 5  | Evaluate the need for disarmament to world peace.  | K5 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 22.                | <b>Core 14:</b><br>History of USA                                      | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | Remember the important historical events in the U.S.A.   | K1 |

|     |   |  |  |    |
|-----|---|--|--|----|
|     | 1865 A.D to 1990 A.D  | 2  | Understand the sufferings of Negroes and support against apartheid.                                  | K2 |
|     |   | 3  | Apply the reforms of F. D. Roosevelt.  | K3 |
|     |   | 4  | Analyze the merits and demerits of the foreign policy of the U.S.A.                                  | K4 |
|     |   | 5  | Evaluate the role of U.S.A. in the Cold War.   | K5 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 23. | <b>Core 15:</b><br>Applied History for Civil Service Examinations       | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Remember the Indian and global events in history.  | K1 |
|     |   | 2  | Understand history subject and opt it as an optional subject in civil service examination.           | K2 |
|     |   | 3  | Apply the acquired knowledge to successfully qualify in civil service examination.                   | K3 |
|     |   | 4  | Scrutinize all the fact and information for competitive examinations.                                | K4 |
|     |   | 5  | Evaluate his/her capability of answering to multiple choice questions in competitive exam.           | K5 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 24. | <b>Elective II</b><br>Introduction to Journalism and Mass Communication | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Remember the historical significance of journalism in Indian freedom struggle.                       | K1 |
|     |   | 2  | Understand the importance, functions & scope of communication and media.                             | K2 |
|     |   | 3  | Apply their knowledge in News writing; News editing and choose careers in Journalism and Mass media. | K3 |
|     |   | 4  | Analyze more about newspapers, editing pages.  | K4 |
|     |   | 5  | Create more interest on various national and international news agencies.                            | K6 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 25. | <b>Elective III</b><br>Tourism in Tamilnadu                             | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | Remember the significance of tourist places in Tamil Nadu.   | K1 |
|     |   | 2  | Learn about the Architecture and Sculpture of the Temples in Tamil Nadu.                             | K2 |
|     |   | 3  | Highlight the significance of Hill Stations and commercial cities of Tamil Nadu.                     | K2 |
|     |   | 4  | Get motivated to choose a career in tourism.   | K3 |
|     |   | 5  | Analyze the Eco-tourist spots in Tamil Nadu.   | K4 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |



|     |   |  |   |    |
|-----|---|--|---|----|
| 26. | <b>Skill Based Subject-IV</b><br>Computer Application in History – II (Practical) | On the successful completion of the course, student will be able to:   |   |    |
|     |   | 1  | Remember short cut keys and learn the speedy operation of computers | K1 |
|     |   | 2  | Understand the utilization of internet.                             | K2 |
|     |   | 3  | Apply his computer knowledge in searching educational resources.    | K3 |
|     |   | 4  | Analyze the concept of working of M.S. Office, M.S Word and Excel.  | K4 |
|     |   | 5  | Able to create Web pages.   | K6 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |

# **MA History**

## **Program Outcomes (POs)**

- Acquire mastery of the historical knowledge of the diversity of human experience in political, social, cultural, economic, scientific fields and events over a period of time and space.
- Understand the similarities, differences and interconnections of different histories of the world and acquire multicultural sensitivity by exploring the past in different angles.
- Demonstrate mastery of information literacy through writing about the Indian History, World History, History of Tamil Nadu, Archaeology, Museology and Tourism.
- Communicate historical knowledge, interpretations, and arguments clearly in oral presentations and history projects.
- Illustrate an attitude of research of social relevance and develop a secular, scientific approach towards history
- Analyze the political, social and cultural aspects of different times, regimes and dynasties.
- Compare and contrast different events, ideas, thoughts, philosophies and institutions of history to construct a coherent narrative.
- Identify and appreciate the contributions of civilizations, empires and nation states.
- Recognize and evaluate the achievements of man in history and progress of ideas
- Develop worthy intellectual attitude and will acquire the modern skills, aptitude and potentialities of most creative mode in history.

## **Program Specific Outcomes (PSOs)**

- To acquire mastery of the knowledge in history and its various political and social structures, cultures, specific events, facts, terminologies, conventions, and methodology
- To obtain a deep understanding of history with the ability to comprehend the facts and principles of different historical times and make an advance exploration in specific historical topics.

- To assess the values of unity in diversity and construct a humanitarian approach towards society to become better citizens of their nation and world.
- To analyze the history of different societies, civilizations, cultures and their interconnection and classify, compare and contrast the events, facts, concepts, ideas and philosophies.
- To evaluate and recognize the values of history
- To integrate their learning from different fields of history to develop a scientific, secular approach towards history and advance arguments in support of right historical contention.
- To equip with the essentialities of their choice of chosen career.

## M.A HISTORY

| S.NO              | COURSE  | COURSE OUTCOME   |   |    |
|-------------------|---|--|---|----|
| <b>SEMESTER I</b> |   |  |   |    |
| 1.                | CORE 1:<br>Social and Cultural<br>History of India upto<br>1206 A.D.        | On the successful completion of the course, student will be able to: |   |    |
|                   |   | 1  | Remember and follow clues, traces left by people who lived in the past.   | K1 |
|                   |   | 2  | Understand the problems of their times, their legacy, literature, inventions and discoveries that slowly transformed human societies. | K2 |
|                   |   | 3  | Apply the concepts for contemplation and promoting universal brotherhood and harmony.   | K3 |
|                   |   | 4  | Analyze the impact of foreign invasions on society and culture.   | K4 |
|                   |   | 5  | Evaluate the contribution of Jainism and Buddhism to Indian Culture   | K5 |
|                   |   |  |   |    |
| 2.                | CORE 2: History of the<br>Delhi<br>Sultanate from 1206<br>A.D. to 1526 A.D. | On the successful completion of the course, student will be able to: |   |    |
|                   |   | 1  | Continue to enhance their knowledge through independent work and practice.  | K1 |
|                   |   | 2  | Understand the administration and disintegration of Delhi Sultanate.  | K2 |
|                   |   | 3  | Apply their knowledge and critical understanding of history to a greater extent.  | K3 |
|                   |   | 4  | Act autonomously for planning and executing research and writing.   | K4 |
|                   |   | 5  | Critically evaluate the current research, practice, and debate in Medieval history. of India  | K5 |
|                   |   |  |   |    |
| 3.                | CORE 3: History of the<br>Mughals from 1526<br>A.D to 1773 A.D              | On the successful completion of the course, student will be able to: |   |    |
|                   |   | 1  | Recall the political condition of India as gleaned from Babur Nama.   | K1 |
|                   |   | 2  | Summarize the contribution of Sher Shah to Mughal administration.   | K2 |
|                   |   | 3  | Recognize the importance of Akbar's Policy in consolidation of the Mughal Rule.   | K3 |

|    |   |  |  |    |
|----|---|--|--|----|
|    |   | 4  | Understand the development of Art and Architecture during the period of Shah Jahan.  | K2 |
|    |   | 5  | Evaluate Aurangzeb and his policies.   | K5 |
|    |   | 6  | Analyse the factors leading to the establishment of British rule in India.   | K4 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 4. | CORE – 4<br>Constitutional History of India from 1773 A.D. to 1950 A.D. | On the successful completion of the course, student will be able to:   |  |    |
|    |   | 1  | Remember the provisions of Charter Acts and Government of India Acts passed by the British government and learn about the historical evolution of the Indian Constitution of 1950. | K1 |
|    |   | 2  | Understand the origin and development Republican Government of India.  | K2 |
|    |   | 3  | Analyze the historical background of the constitution.   | K4 |
|    |   | 4  | Evaluate the importance of Fundamental Rights and Duties.  | K5 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 5. | CORE – 5 History of Indian National Movement since 1885 A.D.            | On the successful completion of the course, student will be able to:   |  |    |
|    |   | 1  | Acquire in depth knowledge of freedom struggle in India.   | K1 |
|    |   | 2  | Understand the factors leading to the rise of nationalism and trace the emergence of Indian National Congress.   | K2 |
|    |   | 3  | Contribute to the society by learning principles of non- violence, sathyagraha, service, sacrifice and patriotism.   | K3 |
|    |   | 4  | Analyse the implications of Colonialism and Communalism.   | K4 |
|    |   | 5  | Evaluate the importance of communal harmony.   | K6 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |

|                    |   |  |   |
|--------------------|---|--|---|
| 6.                 | Elective I - Epigraphy  | On the successful completion of the course, student will be able to:   |   |
|                    |   | 1  | Remember the important inscriptions of India. K1  |
|                    |   | 2  | Understand the meaning and evolution of Epigraphy. K2   |
|                    |   | 3  | Identify ancient scripts and also find out new inscriptions. K3   |
|                    |   | 4  | Demonstrate the ability to apply his knowledge in recognizing the scripts. K4   |
|                    |   | 5  | Evaluate the importance of inscriptions in the study of history. K5   |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |
| <b>SEMESTER II</b> |   |  |   |
| 7.                 | CORE – 6 Social and Cultural History of Tamil Nadu from Sangam Age to 1800 A.D. | On the successful completion of the course, student will be able to:   |   |
|                    |   | 1  | Infer the sources available to study the ancient Tamil History and discuss the cultural life during Sangam Age. K1  |
|                    |   | 2  | Outline the development of education, religion and architecture during Pallava period. K2   |
|                    |   | 3  | Assess the influence of temple on social and cultural life of Cholas. K3  |
|                    |   | 4  | Evaluate the economic life of Pandiyas and spread of Islam in Tamil Nadu. K5  |
|                    |   | 5  | Compare, contrast and inspect the changes in architecture and development of literature during Pallava, Chola, Pandya, Vijayanagar and Nayaks periods. K4 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |
| 8.                 | CORE – 7 Social and Cultural History of Tamil Nadu from 1800 A.D. to 1916 A.D.  | On the successful completion of the course, student will be able to:   |   |
|                    |   | 1  | Recall the sources, facts, events, ideas and personalities. K1  |
|                    |   | 2  | Understand and acquire an in-depth knowledge of the social life in Tamil Nadu during 19 <sup>th</sup> Century. K2   |
|                    |   | 3  | Apply a humanitarian approach towards all social problems. K3   |

|   |   |   |  |    |
|---|---|---|--|----|
|   |   | 4   | Analyze the impact of western system of education in Tamil Nadu.   | K4 |
|   |   | 5   | Evaluate and appreciate the role of reforms movements.   | K5 |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |    |
| 9.  | CORE – 8 Panchayat Raj  | On the successful completion of the course, student will be able to:                        |  |    |
|   |   | 1   | Remember the facts, terms and history of Panchayat Raj system in Tamilnadu.                                    | K1 |
|   |   | 2   | Understand the origin of Panchayat Raj System in India.  | K2 |
|   |   | 3   | Analyse the functioning of Panchayat Raj system in Independent India.  | K4 |
|   |   | 4   | Evaluate the contributions of self governing institutions for upliftment of the rural masses.                  | K5 |
|   |   | 5   | Judge the working of Panchayat Raj system in India at its grass root level and the benefit of welfare schemes. | K5 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |   |   |  |    |
| 10.   | CORE – 9 History of KonguNadu                                     | On the successful completion of the course, student will be able to:                        |  |    |
|   |   | 1   | Remember the historical events that happened in Kongu region.  | K1 |
|   |   | 2   | Understand the history of Kongu Nadu under the rule of various dynasties.                                      | K2 |
|   |   | 3   | Construct an idea about Kongu region as a distinct part of Tamil Nadu in its culture.                          | K3 |
|   |   | 4   | Identify the important cities and towns and analyze their historical significance.                             | K4 |
|   |   | 5   | Evaluate and recognize economic development of Kongu Nadu.   | K5 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |   |   |  |    |
| 11.   | CORE-10 Contemporary History of India from 1947 A.D. to 2014 A.D. | On the successful completion of the course, student will be able to:                        |  |    |
|   |   | 1   | Recall the political events since Independence.  | K1 |
|   |   | 2   | Understand the Centre - State Relations and rise of regional parties.  | K2 |
|   |   | 3   | Assess the significance of popular movements after Independence.   | K3 |
|   |   | 4   | Analyse the reservation policy, New Economic policy and the impact of Science & Technology.                    | K4 |
|   |   | 5   | Evaluate the major issues that challenge Indian democracy.   | K5 |

|                     |  |   |   |    |
|---------------------|--|---|---|----|
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 12.                 | Elective II – Principles and Methods of Archaeology                        | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | Master the archaeological aspects of Pre-historical cultures and contribution of various archaeological experts.  | K1 |
|                     |  | 2   | Identify and understand key themes and concepts in Archaeology and its development.   | K2 |
|                     |  | 3   | Apply his knowledge to find out archaeological sites and artifacts.   | K3 |
|                     |  | 4   | Analyze the origin and nature of National and State Department of Archaeology in India.   | K4 |
|                     |  | 5   | Evaluate excavation, dating methods and other techniques used in Archaeology.   | K5 |
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |   |    |
| <b>SEMESTER III</b> |  |   |   |    |
| 13.                 | CORE – 11 History of Ancient Civilization up to 476 A.D. (Excluding India) | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | Acquire the knowledge of the early History of the World.  | K1 |
|                     |  | 2   | Understand the impact of geographical features on history.  | K2 |
|                     |  | 3   | Identify and construct an idea about the tools used by the Stone Age men.   | K3 |
|                     |  | 4   | Compare and contrast the society and culture of different civilizations.  | K4 |
|                     |  | 5   | Recognise the contribution of different civilizations.  | K5 |
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |   |    |
| 14.                 | CORE – 12 History of Medieval Civilization from 476 A.D. to 1453 A.D.      | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | Remember and think critically about the development of nationalities and people politically, socially, and economically in medieval times.                                | K1 |
|                     |  | 2   | Understand the changing social and political role of religions in Medieval society and how mixing of religion with politics leads to fragmentation of polity and society. | K2 |
|                     |  | 3   | Analyze the assimilation and transformation of culture and science and acquire the historical awareness of human experience in relation to place and time.                | K4 |
|                     |  | 4   | Trace the evolution of political systems and religions and  | K5 |



|  |   |  |  |    |
|--|---|--|--|----|
|  |   | evaluate their contribution to world civilization.   |  |    |
|  |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 15.  | CORE – 13<br>Historiography:<br>Theory and Methods                              | On the successful completion of the course, student will be able to:   |  |    |
|  |   | 1  | Remember the various definitions and terminologies of History.   | K1 |
|  |   | 2  | Understand the meaning of history and acquire the knowledge of history of historiography.  | K2 |
|  |   | 3  | Apply the concepts of history in future historical research and will offer explanations about analytical historical writings.                                | K3 |
|  |   | 4  | Able to extract the evidence from primary and secondary sources to evaluate them in historical context.  | K4 |
|  |   | 5  | Create an idea of recent trends in historiography.   | K5 |
|  |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |
| 16.  | CORE – 14 History of Far East from 1800 A.D. to 1989 A.D.                       | On the successful completion of the course, student will be able to:   |  |    |
|  |   | 1  | Remember the historical events and interpret them in historical context.   | K1 |
|  |   | 2  | Understand the impact of world wars on China and Japan, Rise of Communism in China and the ideological impact, emergence of China and Japan in Modern world. | K2 |
|  |   | 3  | Analyze the interconnection of global events and their effect on nations.  | K4 |
|  |   | 4  | Evaluate the causalities of wars and the good fortune of peace that made Japan an economic power.  | K5 |
| <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |  |  |    |
| 17.  | CORE – 15 Social and Cultural History of Tamil Nadu from 1916 A.D. to 2001 A.D. | On the successful completion of the course, student will be able to:   |  |    |
|  |   | 1  | Remember the important leaders and reformers of the period of study.   | K1 |
|  |   | 2  | Understand the contribution of Dravidian Movement to establish social justice.   | K2 |
|  |   | 3  | Assess the role of Kamaraj in the field of education and its impact.   | K3 |
|  |   | 4  | Compare and contrast the society and culture of various periods of history in Tamil Nadu.  | K4 |

|                    |   |   |   |    |
|--------------------|---|---|---|----|
| 18.                |   | 5   | Judge the importance of social welfare measures.  | K5 |
|                    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
|                    | Elective III – Interview Skills and Techniques                              | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   | 1   | Remember the etiquette and mannerism.   | K1 |
|                    |   | 2   | Understand the meaning and nature of interviews.  | K2 |
|                    |   | 3   | Apply the soft skills and the knowledge acquired in real life situations.   | K3 |
|                    |   | 4   | Analyse and Identify the strengths and weakness.  | K4 |
|                    |   | 5   | Recognize the importance of the Interview skills and Techniques.  | K5 |
|                    |   | 6   | Write a good application and curriculum vitae.  | K6 |
|                    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>SEMESTER IV</b> |   |   |   |    |
| 19.                | CORE – 16 International Relations and Diplomacy from 1914 A.D. to 1991 A.D. | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   | 1   | Recall the political events and their effects on international relations.   | K1 |
|                    |   | 2   | Understand the concept of balance of power.   | K2 |
|                    |   | 3   | Explain the rise of dictatorship and it evil effects on world politics.   | K3 |
|                    |   | 4   | Analyze the historical background of international relations between two World Wars.                                    | K4 |
|                    |   | 5   | Evaluate the importance of world peace.   | K5 |
|                    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |   |    |
| 20.                | CORE – 17 Project and Viva Voce   | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   | 1   | Remember the process of doing research and acquire knowledge of selection of topic, collection and analysis of sources. | K1 |
|                    |   | 2   | Understand the methodology of research.   | K2 |
|                    |   | 3   | Apply the acquired knowledge in future research studies.  | K3 |
|                    |   | 4   | Compare and contrast different types of sources.  | K4 |

|     |   |  |  |    |  |
|-----|---|--|--|----|--|
| 21. |   | 5  | Evaluate the sources on the basis of their closeness to truth and derive a conclusion.                   | K5 |  |
|     |   | 6  | Document the project.  |    |  |
|     | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |  |  |    |  |
|     | Special Elective – 1<br>Women Studies   | On the successful completion of the course, student will be able to: |  |    |  |
|     |   | 1  | Remember the important social legislations concerning Women.   | K1 |  |
|     |   | 2  | Understand the ideals of feminism.   | K2 |  |
|     |   | 3  | Apply his wisdom in promotion of women’s rights.   | K3 |  |
|     |   | 4  | Analyze the importance of the multidimensional role of women in society.                                 | K4 |  |
|     |   | 5  | Extend support in the creation of an erudite society respecting human rights.                            | K5 |  |
|     | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |  |  |    |  |
| 22. | Special Elective – 2<br>Journalism and Mass<br>Communication                                | On the successful completion of the course, student will be able to: |  |    |  |
|     |   | 1  | To remember the role of press in obtaining, preserving and exercising freedom of expression and thought. | K1 |  |
|     |   | 2  | To understand the course of Indian journalism.   | K2 |  |
|     |   | 3  | To apply the tools of journalism and mass communication.   | K3 |  |
|     |   | 4  | To analyze the components and genuinity of the news and social media.                                    | K4 |  |
|     |   | 5  | To create news agency or to take up freelance journalism.  | K5 |  |
|     | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |  |  |    |  |
| 23. | Elective IV – Temple<br>Art and Architecture of<br>Tamilnadu                                | On the successful completion of the course, student will be able to: |  |    |  |
|     |   | 1  | Remember the important temples of Tamilnadu.   | K1 |  |
|     |   | 2  | Understand the art and architectural features of the temples of various dynasties.                       | K2 |  |
|     |   | 3  | Choose temple study as a subject for research.   | K3 |  |
|     |   | 4  | Differentiate the art and architecture of different dynasties and period.                                | K4 |  |
|     |   | 5  | Evaluate the skill of artisans in producing the marvels of temple art and architecture.                  | K5 |  |
|     | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |  |  |    |  |

## B.A. ECONOMICS

### Programme Specific Objectives (PSO) For Under Graduate Degree in Economics

- PSO 1: **Knowledge of Economic System:** An ability to understand economic theories and functioning of basic micro- economic and macro-economic system
- PSO 2: **Statistical and Mathematical skills:** Acquaint with collection, organization, tabulation and analysis of empirical data. Ability to use basic mathematical and statistical tools to solve real economic problems.
- PSO 3: **Econometric Application:** Acquaint with basic and applied econometric tools and methods used in Economics. The aim of this course is to provide foundation in applied econometric analysis and develop skills required for empirical research in Economics. It also covers statistical concepts of hypothesis testing, estimation and diagnostic testing of simple and multiple regression model.
- PSO 4: **Development Perspectives:** Defining the developmental policies designed for developed and developing economics. The course also acquaints with the measurement of development, with the help of theories along with the conceptual issues of poverty and inequalities.
- PSO 5: **Environmental strategy and Management:** This course emphasizes on environmental problems emerging from economic development, Economic principles are applied for valuation of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental assessments.
- PSO 6: **Perspectives on Indian Economy:** Acquaint with basic issue of Indian economy and learn the basic concepts of monetary analysis and financial marketing in Indian Financial markets. This course reviews major trends in economic indicators and policy debates in India in the post-independence period.

## **Programme Outcome (PO) For Under Graduate Degree in Economics**

- PO 1:** Creation of knowledge in fundamentals of Economics, application of Economics with the help of Mathematics, Statistics and Computer Applications is a strong foundation for UG Students.
- PO 2:** Train the students to understand the concepts and theories in Economics to practical problems solving in the realworld.
- PO 3:** Decision making and evaluate the solutions for useful complex economic issues and train the students to meet the specified needs to resolve complex economic problems.
- PO 4:** Train the students in Industrial, Agricultural and Service sector economics. This will be helpful for them to get into the concern sector for their Job Oriented goals.
- PO 5:** Create knowledge and select the issues to adopt the techniques to understand resource allocation and Macro Economic policies in Indian Economy.
- PO 6:** By way of getting complete knowledge in Economics may helpful for them to commit for the professional Ethics and responsibilities taken by them in their professional Career.
- PO 7:** Students of undergraduate in Economics are practiced for Basic knowledge in Economics, Mathematics, Statistics and Accountancy. This type of getting knowledge may helpful to students to clear any kind of basic Competitive Examinations.
- PO 8:** Knowledge in Economics and creation of domain knowledge will be effectively served to the students to understand the Society, Societal complex problems and for attainment of Comprehensive Solutions.

## M.A. ECONOMICS

| <b>Program Outcomes (POs)</b>                                |   |
|--|---|
| On successful completion of the <b>M.A Economics</b> program |   |
| PO1  | Identify the standard level of growth and development of the economy of the country and to determine and frame planning policies.   |
| PO2  | Identify and formulate the research design, analyze data and be able to unite the research report and provide valid inferences.   |
| PO3  | Understand the concepts of national income, macroeconomic variables such as multiplier, consumption, investment and general equilibrium.  |
| PO4  | To gain mathematical knowledge for better understanding of economic concepts and theory and ability to apply the knowledge in the formulation and validation of economic theories.                                  |
| PO5  | Understand and apply the knowledge of the industrial economics on location, efficiency, productivity and industrial policies  |
| PO6  | Frame monetary policies, understand and analyze the value of money, cashbalance, capital markets and banking system and hence improve the ability to compare central bank function with that of the othercountries. |
| PO7  | To understand how the individuals and firms allocate their scarce resources and to provide training andemployment.  |
| PO8  | Improve the ability to formulate theories and economic models to test and validate the concepts with practical knowledge.   |
| PO9  | Used to estimate the specific figures which enable them to predict future economically oriented events.   |
| PO10   | Engage effectively with computer knowledge especially Windows, LINUX and other software and to analyze and interpret the data.  |

| <b>Program Specific Outcomes (PSOs)</b>   |  |
|---|--|
| After the successful completion of <b>M.A Economics</b> program, the students are expected to |  |
| PSO1  | To apply economic theories and to expand the problem-solving acumen.   |
| PSO2  | They will be taught the applications of theories in analyzing current economic problems  |
| PSO3  | Conscious about the socio-economic environment, both domestic and international and its implications on business.  |
| PSO4  | The students of Economics can easily crack the competitive examinations and can become successful in getting employment opportunities.                           |
| PSO5  | Open up research opportunities in the national level premier educational institutes.   |
| PSO6  | The character building of students and makes them responsible citizens.  |
| PSO7  | The students are exposed to national and international problems and hence they will have a thorough understanding of national and international economic events. |
| PSO8  | To understand the importance of inclusion, development and sustainability in order to resolve related local, national and global issues.                         |
| PSO9  | To foster a spirit of scientific inquiry and creativity.   |
| PSO10   | To geared up for advanced level of studies.  |

## BACHELOR OF ECONOMICS

| S.NO               | COURSE   | COURSE OUTCOME   |  |    |
|--------------------|--|--|--|----|
| 1.                 | Core 1:<br>MICRO<br>ECONOMICS-I                            | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | To improve the knowledge of students on the basics of Micro Economics                                    | K1 |
|                    |  | 2  | To analyze the economic relationship between the variables.  | K2 |
|                    |  | 3  | To enhance the skills of students in the measurement of variables and relationship.                      | K3 |
|                    |  | 4  | To improve the attitude of students towards economic laws.   | K4 |
|                    |  | 5  | To generate an interest in the application of economics for business decision, planning and forecasting. | K6 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 2.                 | Core 2:<br>AGRICULTURAL<br>ECONOMICS                       | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | To improve the knowledge of students on the status of agricultural sector.                               | K1 |
|                    |  | 2  | To encourage the skills of students in the measurement of productivity.                                  | K2 |
|                    |  | 3  | To stimulate the students in the applications of Agricultural economics in pricing.                      | K3 |
|                    |  | 4  | To engage the students in the analysis of debt crisis in the farm sector.                                | K4 |
|                    |  | 5  | To prepare on proactive attitude towards the internal and external changes in the agricultural sector.   | K6 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 3.                 | ALLIED PAPER<br>– I History of<br>India 1600 –<br>1857 AD. | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | Remember the British Administrators and their reforms  | K1 |
|                    |  | 2  | Understand the colonial wars and their impact.   | K2 |
|                    |  | 3  | Apply the constitutional provisions to understand the present political developments.                    | K3 |
|                    |  | 4  | Analyze the role of Dalhousie in modernization in India.   | K4 |
|                    |  | 5  | Evaluate the social reforms and changes in Indian society  | K6 |
|                    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| <b>Semester II</b> |  |  |  |    |
| 4.                 | Core 3: MICRO<br>ECONOMICS-II                              | On the successful completion of the course, student will be able to:   |  |    |
|                    |  | 1  | To improve the knowledge of students on the markets and competition.                                     | K1 |
|                    |  | 2  | To analyze the business decision process.  | K2 |
|                    |  | 3  | To improve the skill of students in the findings of market equilibria                                    | K3 |
|                    |  | 4  | To motivate the students improving their attitude towards the logics of factor pricing.                  | K4 |

|    |   |  |  |    |
|----|---|--|--|----|
|    |   | 5  | To enhance the applicability of ideas and concepts               | K6 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 5. | Core paper :4<br>HISTORY OF<br>ECONOMIC<br>DOCTRINE :     | On the successful completion of the course, student will be able to:   |  |    |
|    |   | 1  | To create knowledge on the evaluation of economic ideas.         | K1 |
|    |   | 2  | To increase a positive attitude towards economic ideas.          | K2 |
|    |   | 3  | To make the analytical interest in the Marxian Economics.        | K3 |
|    |   | 4  | To understand the application of economic theories.              | K4 |
|    |   | 5  | To enhance the applicability of ideas and concepts               | K5 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 6. | Allied Paper 2 :<br>HISTORY OF<br>INDIA 1858 –<br>1964 AD | On the successful completion of the course, student will be able to:   |  |    |
|    |   | 1  | Remember the historical events after Queen’s Proclamation.       | K1 |
|    |   | 2  | Understand the factors responsible for emergence of Nationalism. | K2 |
|    |   | 3  | Apply the principles of Ahimsa and Satyagraha.                   | K3 |
|    |   | 4  | Evaluate the importance to Independence.                         | K4 |
|    |   | 5  | Analyze the impact of Colonialism                                | K6 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |



| <b>Semester III</b> |   |   |   |    |
|---------------------|---|---|---|----|
| 7.                  | Core 5: MACRO ECONOMICS-I                         | On the successful completion of the course, student will be able to:                        |   |    |
|                     |   | 1   | Understand the evolution of Macro Economics and also know the difference between micro and macroeconomics.  | K1 |
|                     |   | 2   | Examine the various concepts of National income Accounting and issues related to measurement of National income, and also develop an environmental concern in economic activities | K2 |
|                     |   | 3   | Comprehend the classical theory of output, employment and income and consumption function   | K3 |
|                     |   | 4   | Apply the knowledge to understand the Consumption function and theories of consumption function.  | K4 |
|                     |   | 5   | Gain the knowledge about various concepts of investment, determinants of investment, role of MEC.   | K6 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| 8.                  | Core 6: STATISTICAL METHODS                       | On the successful completion of the course, student will be able to:                        |   |    |
|                     |   | 1   | To get knowledge of method of collecting data.  | K1 |
|                     |   | 2   | To understand the skill of draw the various diagram and graphical representation.   | K2 |
|                     |   | 3   | To improve the analytical skill of measures of Central Tendency.  | K3 |
|                     |   | 4   | To analyse the Correlation and Regression.  | K4 |
|                     |   | 5   | To acquire the knowledge on index numbers.  | K5 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| 9.                  | Allied Paper 3: BUSINESS MANAGEMENT FOR ECONOMICS | On the successful completion of the course, student will be able to:                        |   |    |
|                     |   | 1   | To get the knowledge of nature and functions of management.   | K1 |
|                     |   | 2   | To acquire skill of various management planning.  | K2 |
|                     |   | 3   | To know the forecasting techniques and decision making.   | K3 |
|                     |   | 4   | To acquire knowledge of manpower planning, motivation theory and communication Barriers and importance.   | K4 |
|                     |   | 5   | To understand the importance of leadership in business scenario   | K5 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |

|                    |  |   |  |    |
|--------------------|--|---|--|----|
| 10                 | PART – IV<br>SKILLS BASED<br>SUBJECT PAPER<br>- I: FINANCIAL<br>ACCOUNTING | On the successful completion of the course, student will be able to:                        |  |    |
|                    |  | 1   | To recall the basic accounting principles and techniques   | K1 |
|                    |  | 2   | To get knowledge of double entry system, Journals, Ledger and trial balance.                                 | K2 |
|                    |  | 3   | To understand the ideas of bank reconciliation statement.  | K3 |
|                    |  | 4   | To get application knowledge of preparing final accounts.  | K4 |
|                    |  | 5   | To enhance the application knowledge of Single Entry System, Income & Expenditure Account and Balance Sheet. | K5 |
|                    |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| <b>Semester IV</b> |  |   |  |    |
| 11.                | Core 7:<br>MACRO<br>ECONOMICS – II   | On the successful completion of the course, student will be able to:                        |  |    |
|                    |  | 1   | To Explain the principle of Multiplier and Accelerator, Super Multiplier.                                    | K1 |
|                    |  | 2   | To Attain the knowledge in classical and Keynesian theories of income and employment.                        | K2 |
|                    |  | 3   | To Analyze the various phases of trade cycle and the theories of trade cycles.                               | K3 |
|                    |  | 4   | To Understand the working conditions of product and money market, Shift in IS and LM curves.                 | K4 |
|                    |  | 5   | To Explain the Economic role of monetary and fiscal policies in developing Economy.                          | K5 |
|                    |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
|                    | Core 8:<br>MATHEMATI<br>CAL<br>ECONOMICS                                   | On the successful completion of the course, student will be able to:                        |  |    |
|                    |  | 1   | To create the fundamental knowledge in Mathematics.  | K1 |
|                    |  | 2   | To encourage the students to understand the concepts.  | K2 |
|                    |  | 3   | To train the students in the analysis of economics issues.   | K3 |
|                    |  | 4   | To help the students to calculate the changes in basic economic variables                                    | K4 |
|                    |  | 5   | To prepare students in decision making.  | K6 |
|                    |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |

|     |   |   |  |    |
|-----|---|---|--|----|
| 13. | Allied 4:<br>COMPUTER<br>APPLICATIONS<br>IN<br>ECONOMICS          | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To improve the knowledge of students in computer.  | K1 |
|     |   | 2   | To encourage the students to acquire knowledge on the basic concepts of computer in economics.     | K2 |
|     |   | 3   | To provide knowledge on business applications.   | K3 |
|     |   | 4   | To provide the students to develop computer skills and its applications in economics and business. | K4 |
|     |   | 5   | Useful to students to get practical knowledge for their employment purposes.                       | K6 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 14. | Part IV –<br>Skill Based<br>Subject II-<br>TRADE<br>DOCUMENTATION | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To help the students to know about the importance of international trade and licensing.            | K1 |
|     |   | 2   | To understand the necessary knowledge on shipping procedures.                                      | K2 |
|     |   | 3   | To know about the basic export and import documents.   | K3 |
|     |   | 4   | Make the students to gain knowledge on basic export procedures                                     | K4 |
|     |   | 5   | To help the students to search for jobs in export industries                                       | K6 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |

| <b>Semester V</b> |  |   |  |    |
|-------------------|--|---|--|----|
| 15.               | Core 9:<br>MONETARY<br>ECONOMICS                           | On the successful completion of the course, student will be able to:                        |  |    |
|                   |  | 1   | To help the students to know about the importance of money in the economy.                   | K1 |
|                   |  | 2   | Make to learn about theories of money.   | K2 |
|                   |  | 3   | To acquaint the students with the working of money and financial markets                     | K3 |
|                   |  | 4   | To encourage the students to learn about the role of money in different business situations. | K4 |
|                   |  | 5   | Help the students to know about the importance of banking system in the economy              | K6 |
|                   |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 16.               | Core 10: INDIAN<br>ECONOMIC<br>DEVELOPMENT<br>AND POLICIES | On the successful completion of the course, student will be able to:                        |  |    |
|                   |  | 1   | Understand the new economic reforms and the schemes of central and state Government          | K1 |
|                   |  | 2   | Assessing the role and growth of agriculture and its impact on rural development             | K2 |
|                   |  | 3   | Examining the population growth in India and its impact on the economy                       | K3 |
|                   |  | 4   | To measure the infrastructural facilities and its role in economic development               | K4 |
|                   |  | 5   | To analyze the problems of the regional economy  | K6 |
|                   |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 17.               | Core 11:<br>INTERNATION<br>AL<br>ECONOMICS                 | On the successful completion of the course, student will be able to:                        |  |    |
|                   |  | 1   | To understand the basic concepts of International Trade                                      | K1 |
|                   |  | 2   | To evaluate and apply the comparative cost theory  | K2 |
|                   |  | 3   | To examine the balance of payments and the terms of trade in an economy                      | K3 |
|                   |  | 4   | To analyse the exchange rate of the economy  | K4 |
|                   |  | 5   | To assess the functioning of the international financial institutions                        | K6 |
|                   |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 18.               | Core 12:<br>ENTREPRENEURS<br>HIP<br>DEVELOPMENT            | On the successful completion of the course, student will be able to:                        |  |    |
|                   |  | 1   | To acquire the knowledge regarding characteristics of an entrepreneur                        | K1 |
|                   |  | 2   | To develop an interest in entrepreneurial activity   | K2 |

|                    |   |   |   |    |
|--------------------|---|---|---|----|
|                    |   | 3   | To equip them with entrepreneurial skills for self-employment               | K3 |
|                    |   | 4   | To assess the training and financial facilities available for entrepreneurs | K4 |
|                    |   | 5   | To understand the business correspondence and communication                 | K6 |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| 19.                | PART - IV<br>SKILL BASED<br>SUBJECT<br>PAPER III-<br>COMPUTER<br>SYSTEM – I –<br>THEORY | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   | 1   | To understand the basic concepts of computer                                | K1 |
|                    |   | 2   | To analyse the input devices of the computer                                | K2 |
|                    |   | 3   | To examine the output devices of a computer                                 | K3 |
|                    |   | 4   | To work practically with tally ERP  | K4 |
|                    |   | 5   | To enable students to work on different kinds types of vouchers             | K6 |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| <b>Semester VI</b> |   |   |   |    |
| 20.                | Core 13:<br>FISCAL<br>ECONOMICS   | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   |   | To create knowledge on the scope of fiscal economics                        | K1 |
|                    |   | 2   | To analyze public revenue and the impact of taxation                        | K2 |
|                    |   | 3   | To assess the impact of public expenditure                                  | K3 |
|                    |   | 4   | To understand public debt and the budgetary procedure                       | K4 |
|                    |   | 5   | Application of fiscal instruments on the economy                            | K5 |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| 21.                | Core 14:<br>INDUSTRIAL<br>ECONOMICS   | On the successful completion of the course, student will be able to:                        |   |    |
|                    |   | 1   | To understand the factors determining the size of the firm                  | K1 |
|                    |   | 2   | To examine the factors affecting the location of an industry                | K2 |
|                    |   | 3   | To understand the impact of industrial finance                              | K3 |
|                    |   | 4   | To evaluate the Industrial policies   | K4 |
|                    |   | 5   | To assess the Industrial Productivity.                                      | K5 |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |

|     |   |   |  |    |
|-----|---|---|--|----|
| 22. | Core 15:<br>ENVIRONMENTAL<br>ECONOMICS          | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To familiarize with the theories of environmental economics.   | K1 |
|     |   | 2   | To examine the practical environmental problems and offer solutions.                                 | K2 |
|     |   | 3   | To analyze the regulations and prohibition measure to protect the environment                        | K3 |
|     |   | 4   | To assess India's environmental policies.  | K4 |
|     |   | 5   | To measure the government activity against environmental problem                                     | K6 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 23. | Elective – I:<br>AUDITING                       | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | Ability to perform the analysis of various types of audit.   | K1 |
|     |   | 2   | To understand the audit procedure and audit programmes.  | K2 |
|     |   | 3   | To analyze the vouching and impersonal ledgers.  | K4 |
|     |   | 4   | To gain knowledge and to evaluate Verification and valuation of assets and liabilities.              | K3 |
|     |   | 5   | To construct the knowledge of Rights and duties of company Auditor – Liabilities of company Auditor. | K6 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 24. | Elective – III:<br>ACCOUNTANCY<br>FOR ECONOMICS | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To understand the time value of money  | K1 |
|     |   | 2   | To analyse the financial statement and the comparative statement analysis                            | K2 |
|     |   | 3   | To assess the fund flow statement  | K3 |
|     |   | 4   | To examine the accounting ratios   | K4 |
|     |   | 5   | To evaluate the elements of cost   | K6 |
|     |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |    |

|     |   |  |  |    |
|-----|---|--|--|----|
| 25. | PART – IV<br>SKILL BASED<br>SUBJECT<br>PAPER IV:<br>COMPUTER<br>SYSTEM - II | On the successful completion of the course, student will be able to:   |  |    |
|     |   | 1  | To understand MS office Basics<br>To analyze MS Word | K1 |
|     |   | 2  | To evaluate and work with MS Excel                   | K2 |
|     |   | 3  | To work with MS Power Point                          | K3 |
|     |   | 4  | To understand MS Access                              | K4 |
|     |   | 5  | To understand MS office Basics                       | K5 |
|     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |    |

## MASTER OF BUSINESS ECONOMICS

| S.NO              | COURSE  | COURSE OUTCOME   |   |    |
|-------------------|---|--|---|----|
| <b>Semester I</b> |   |  |   |    |
| 1.                | Core Paper. 1   | On the successful completion of the course, student will be able to: |   |    |
|                   | ADVANCED<br>MICRO<br>ECONOMICS-I  | 1  | To understand the economic theories and concepts.                               | K1 |
|                   |   | 2  | To understand about the demand potentials.                                      | K2 |
|                   |   | 3  | To analyze the production and cost.   | K3 |
|                   |   | 4  | To gain knowledge and to evaluate the price and the output for various markets. | K4 |
|                   |   | 5  | To construct the knowledge of policy decision.                                  | K6 |
|                   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |   |    |
| 2.                | Core Paper. 2   | On the successful completion of the course, student will be able to: |   |    |
|                   | ECONOMIC<br>DEVELOPME<br>NTAND<br>POLICIES  | 1  | Create the knowledge about the economic theories and growth models.             | K1 |
|                   |   | 2  | Provide an illustration of Indian economy.                                      | K2 |
|                   |   | 3  | Construct the knowledge of economic planning and growth.                        | K3 |
|                   |   | 4  | To critically evaluate the current economic issues.                             | K4 |
|                   |   | 5  | To construct a critical study on the development of the economic scenario.      | K5 |
|                   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |   |    |
| 3.                | Core Paper .3   | On the successful completion of the course, student will be able to: |   |    |
|                   | MARKETING<br>MANAGEMENT   | 1  | To understand about market planning and market environment.                     | K1 |
|                   |   | 2  | To know about consumer behaviour in the context of market segmentation.         | K2 |
|                   |   | 3  | To expose with product promotion branding and pricing techniques                | K3 |
|                   |   | 4  | To express the various channels of distribution.                                | K4 |
|                   |   | 5  | To gain knowledge on marketing strategies and consumer rights.                  | K6 |
|                   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |   |    |
| 4.                | Core Paper. 4   | On the successful completion of the course, student will be able to: |   |    |
|                   | QUANTITATIVE<br>TECHNIQUES<br>FOR<br>MANAGERIAL<br>DECISIONS                                | 1  | To understand the various quantitative techniques in managerial practices.      | K1 |
|                   |   | 2  | To apply the mathematical tools to test and formulate the economic theories.    | K2 |
|                   |   | 3  | To analyze the various techniques of derivatives and their applications.        | K4 |



|                     |  |   |   |    |
|---------------------|--|---|---|----|
|                     |  | 4   | To analyze the quantitative tools for managerial decision.  | K5 |
|                     |  | 5   | To understand the practical knowledge of decision making.   | K6 |
|                     |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |    |
| 5.                  | Elective Paper. 1<br><br>TAMIL NADU<br>ECONOMY         | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | To improve the knowledge of students on the markets and competition.  | K1 |
|                     |  | 2   | To analyze the business decision process.   | K2 |
|                     |  | 3   | To improve the skill of students in the findings of market equilibria   | K3 |
|                     |  | 4   | To motivate the students improving their attitude towards the logics of factor pricing.                               | K4 |
|                     |  | 5   | To enhance the applicability of ideas and concepts  | K6 |
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>SEMESTER -II</b> |  |   |   |    |
| 6.                  | Core Paper. 5<br><br>ADVANCED<br>MICRO<br>ECONOMICS-II | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | To understand basic concepts of micro economics and acquire analytical skills to analyse Problems of economic policy. | K1 |
|                     |  | 2   | To understand the theoretical arguments.  | K2 |
|                     |  | 3   | To analyse various theories of distribution.  | K3 |
|                     |  | 4   | To gain knowledge of the optimal conditions and principles.   | K4 |
|                     |  | 5   | To construct the economic models as an approach.  | K6 |
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 7.                  | Core Paper. 6<br><br>MACRO<br>ECONOMICS                | On the successful completion of the course, student will be able to:                        |   |    |
|                     |  | 1   | To understand the sectoral flow of national income in the economy.  | K1 |
|                     |  | 2   | To evaluate a critical insight on classical and Keynesian macroeconomics models.                                      | K2 |
|                     |  | 3   | To evaluate critically on consumption function and investment function.   | K3 |
|                     |  | 4   | To know the contributions of Friedman, Phelps and Phelps in uncertainty.  | K4 |
|                     |  | 5   | To construct the sound knowledge of macroeconomics policy.  | K5 |
|                     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |

|                     |   |   |  |    |
|---------------------|---|---|--|----|
| 8.                  | Core Paper. 7<br><br>AGRICULTURAL<br>ECONOMICS          | On the successful completion of the course, student will be able to:                        |  |    |
|                     |   | 1   | To understand the nature and scope of agricultural economics.                              | K1 |
|                     |   | 2   | To understand the various land reforms and the importance of land policies.                | K2 |
|                     |   | 3   | To familiarize with production functions in agriculture and productivity.                  | K3 |
|                     |   | 4   | To analyse agriculture marketing functions.  | K4 |
|                     |   | 5   | To construct the role of capital and rural credit.   | K6 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| <b>Semester III</b> |   |   |  |    |
| 9.                  | Core Paper. 8<br><br>ECONOMETRICS                       | On the successful completion of the course, student will be able to:                        |  |    |
|                     |   | 1   | To demonstrate the econometrics models.  | K1 |
|                     |   | 2   | Understand the nature and scope of econometrics as a social science                        | K2 |
|                     |   | 3   | Use appropriate tests to detect autocorrelation  | K4 |
|                     |   | 4   | Evaluating the simultaneous equation model   | K5 |
|                     |   | 5   | To develop the skills of selecting appropriate data and estimate an econometric model.     | K6 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 10.                 | Core Paper. 9<br><br>INDUSTRIAL<br>ECONOMICS            | On the successful completion of the course, student will be able to:                        |  |    |
|                     |   | 1   | To understand the scope of industrial economics and motives of the organizational firm.    | K1 |
|                     |   | 2   | To evaluate economic theories of location and their importance.                            | K2 |
|                     |   | 3   | To investigate the scope and significance of industrial productivity.                      | K3 |
|                     |   | 4   | To examine the concentration of economic power and the application of industrial policies. | K4 |
|                     |   | 5   | To evaluate the industrial backwardness and regional disparities.                          | K6 |
|                     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 11.                 | Elective Paper. 2<br><br>ENTREPRENEURIAL<br>DEVELOPMENT | On the successful completion of the course, student will be able to:                        |  |    |
|                     |   | 1   | . To understand the importance and characteristics of entrepreneurs                        | K1 |

|   |  |  |   |    |
|---|--|--|---|----|
|   |  | 2  | To analyse knowledge of the sources of business ideas.                                    | K2 |
|   |  | 3  | To motivate the women entrepreneurs in the present scenario of the economy.               | K3 |
|   |  | 4  | To be familiar with the objectives of training and finance.                               | K4 |
|   |  | 5  | To be analysed with the objectives of training and finance.                               | K6 |
| <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |  |   |    |
| <b>Semester III</b>   |  |  |   |    |
| 12.   | Core Paper. 10<br><br>MONETARY THEORY AND POLICES        | On the successful completion of the course, student will be able to: |   |    |
|   |  | 1  | To gain sound knowledge in monetary theories and banking practices.                       | K2 |
|   |  | 2  | To evaluate India's monetary problems   | K5 |
|   |  | 3  | To examine role and functions of commercial and central banks                             | K4 |
|   |  | 4  | To gain the knowledge about the Monetary system of LDCs.                                  | K2 |
|   |  | 5  | To analyse the recent development in the monetary economics.                              | K1 |
| <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |  |   |    |
| 13.   | Core Paper. 11<br><br>RESEARCH METHODOLOGY               | On the successful completion of the course, student will be able to: |   |    |
|   |  | 1  | To get knowledge of method of collecting data.  | K1 |
|   |  | 2  | To understand the skill of draw the various diagram and graphical representation.         | K2 |
|   |  | 3  | To improve the analytical skill of measures of Central Tendency.                          | K3 |
|   |  | 4  | To analyse the Correlation and Regression.  | K4 |
|   |  | 5  | To acquire the knowledge on index numbers.  | K5 |
| <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |  |   |    |
| 14.   | Core Paper. 12<br><br>COMPUTER APPLICATIONS IN ECONOMICS | On the successful completion of the course, student will be able to: |   |    |
|   |  | 1  | To become familiar with basic knowledge on computer with languages and operating packages | K1 |
|   |  | 2  | To draw distributive tables, graphs, and trend lines.                                     | K3 |
|   |  | 3  | To estimate the parameters of data analysis and interpret it.                             | K4 |
|   |  | 4  | To use word processing in computers   | K5 |
| <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |  |   |    |

|     |   |   |  |    |
|-----|---|---|--|----|
| 15. | Core Paper.13<br>ENVIRONMENTAL<br>ECONOMICS | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To familiarize with the theories of environmental economics.   | K1 |
|     |   | 2   | To examine the practical environmental problems and offer solutions.                                   | K4 |
|     |   | 3   | To analyze the regulations and prohibition measure to protect the Environment                          | K5 |
|     |   | 4   | To assess India's environmental policies.  | K4 |
|     |   | 5   | To measurement the government activity against environmental problem                                   | K2 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 16. | Core Paper. 14<br>LABOUR<br>ECONOMICS       | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | Demonstrate a sound understanding of the core concepts and tools of labour economics and Policy.       | K2 |
|     |   | 2   | To apply economic principles of labour market and contemporary academic Literature                     | K1 |
|     |   | 3   | To evaluate the nature jobs in social and economic environments  | K4 |
|     |   | 4   | Critically evaluate government policies affecting work and jobs.                                       | K5 |
|     |   | 5   | To identify and utilise the labour welfare legislation in India.                                       | K6 |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| 17. | Elective Paper. 3<br>FINANCIAL<br>MARKETS   | On the successful completion of the course, student will be able to:                        |  |    |
|     |   | 1   | To conversant with the theory and practice of different financial institutions and Markets.            | K1 |
|     |   | 2   | To understand and analyse the interconnection between the monetary forces and real Forces.             | K2 |
|     |   | 3   | To familiar with the role and limitations of money market and capital market                           | K4 |
|     |   | 4   | To understand the Indian markets   | K3 |
|     |   | 5   | To shape and influence the monetary and related policies both at the national and international levels | K5 |

|                    |   |   |  |    |
|--------------------|---|---|--|----|
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |    |
| <b>Semester IV</b> |   |   |  |    |
| 18                 | Core Paper. 15<br><br>PUBLIC ECONOMICS          | On the successful completion of the course, student will be able to:                        |  |    |
|                    |   | 1   | To understand the theoretical aspects of public economics and its applications.                                  | K1 |
|                    |   | 2   | To analyze the efficient allocation for public goods.  | K2 |
|                    |   | 3   | To analyze policy applications on welfare assistance.  | K3 |
|                    |   | 4   | To critically analyze fiscal policies and its implication in Indian economy.                                     | K4 |
|                    |   | 5   | To discuss the implications of policy for efficiency, equity and growth.   | K5 |
|                    |   | 6   | To discuss the implications of policy for efficiency, equity and growth  | K6 |
|                    |   | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create        |  |    |
| 19                 | Core Paper. 16<br><br>INTERNATIONAL ECONOMICS   | On the successful completion of the course, student will be able to:                        |  |    |
|                    |   | 1   | To develop a systematic knowledge on composition, direction and consequences of International trade.             | K1 |
|                    |   | 2   | To understand the processes of international economic relations as the part of global Market economy.            | K2 |
|                    |   | 3   | To acquire skills on the various aspects of exchange rate.   | K3 |
|                    |   | 4   | To aware about international financial markets, balance of payments and the trade Balance, and the capital flow. | K4 |
|                    |   | 5   | To evaluate the role of international institutions on trade practices.   | K5 |
|                    |   | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create        |  |    |
| 20                 | Core Paper. 17<br><br>HUMAN RESOURCE MANAGEMENT | On the successful completion of the course, student will be able to:                        |  |    |
|                    |   | 1   | To analyze human resource planning and forecasting techniques.   | K4 |
|                    |   | 2   | To investigate and interpret the key procedures in recruitment and selection.                                    | K2 |
|                    |   | 3   | To describe and analyze about the training and development.  | K3 |
|                    |   | 4   | To illustrate the essential features of human resource information system.                                       | K1 |
|                    |   | 5   | To evaluate employee self-analysis and reflect upon personal improvement.  | K5 |
|                    |   | 6   | To evaluate significant contemporary issues in human   | K6 |

|    |                     |  |   |    |
|----|---------------------|--|---|----|
|    |                     | resource management.   |   |    |
|    |                     | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create |   |    |
| 21 | Elective Paper. 4   | On the successful completion of the course, student will be able to:                 |   |    |
|    | EXPORT<br>PROCEDURE | 1  | To understand the concepts of custom clearance in international business.   | K2 |
|    |                     | 2  | To know about the process of international customs clearance operations.  | K1 |
|    |                     | 3  | To evaluate the global business environment in terms of economic and legal aspects.                                     | K5 |
|    |                     | 4  | To analyse the principles of international business and strategies adopted by firms to for exporting products globally. | K4 |
|    |                     | 5  | To examine the shipment formalities and procedures.   | K3 |
|    |                     | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create |   |    |

**PROVIDENCE COLLEGE FOR WOMEN**  
**DEPARTMENT OF MATHEMATICS**

B.Sc Mathematics 2022-2023

| <b>Program Specific Outcomes (PSOs)</b>  |  |
|--|--|
| After the successful completion of <b>B. Sc. Mathematics</b> program, the students are expected to |  |
| PSO1   | Maintain a core of mathematical and technical knowledge that is adaptable to changing technologies and provide a solid foundation for extended learning.       |
| PSO2   | Identify the applications of Mathematics in other disciplines and society.   |
| PSO3   | Develop an in-depth knowledge in Mathematics appreciating the connections between theory and its applications.   |
| PSO4   | Demonstrate their mathematical modeling ability, problem solving skills, creative talent and power of communication necessary for various kinds of employment. |
| PSO5   | Develop mathematical aptitude and the ability to think abstractly.   |
| PSO6   | Learn independently and improve one's performance.   |
| PSO7   | Students are equipped to appear competitive examinations.  |

| <b>Program Outcomes (POs)</b>                                     |   |
|---|---|
| On successful completion of the <b>B. Sc. Mathematics</b> program |   |
| PO1   | Students are empowered with analytical and logical skills-to formulate results and construct mathematical argument.   |
| PO2   | Ability to organize, analyze and interpret data accurately in both academic and non -academic context.  |
| PO3   | Demonstrate effective communication of mathematical ideas and creative thinking skills to facilitate solving real world problems as a team and independently. |
| PO4   | Appreciate and identify the connections between Mathematics and other disciplines.  |
| PO5   | Competency to obtain employment in education, public and private sectors.   |
| PO6   | Identify the area of interest for extended learning from the understanding gained from the domain and allied areas of Mathematics.                            |
| PO7   | Develop mathematical aptitude and make critical observations.   |
| PO8   | Enrich them with innovative ideas to face global challenges.  |
| PO9   | Instill a sense of responsibility in tackling professional and social issues ethically.   |
| PO10  | Trigger their passion for research in unexplored areas of Mathematics.  |

**B.Sc MATHEMATICS - Course outcome - 2021-2022**

| S.No  | Course  | Course Outcome  |   |    |  |
|---|---|---|---|----|--|
| 1   | Core 1 :<br>CLASSICAL<br>ALGEBRA                | Semester I  |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Know the concept of Binomial, Exponential, Logarithmic application to summation of series.                                    | K1 |  |
|   |   | CO2   | Acquire a clear knowledge regarding methods to find an  | K2 |  |
|   |   | CO3   | Apply the appropriate tests to find the convergence or  | K3 |  |
|   |   | CO4   | Apply Descartes's rule of signs to find the number of   | K3 |  |
|   |   | CO5   | Analyze the relation between roots and coefficients of the  | K4 |  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |   |   |   |    |  |
| 2   | Core 2 :<br>CALCULUS                            | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Identify areas in Mathematics and other fields where  | K1 |  |
|   |   | CO2   | Understand the concepts of Evolutes and Envelopes, curvature and evolutes.  | K2 |  |
|   |   | CO3   | Apply the concept of change of variables in double and  | K3 |  |
|   |   | CO4   | Apply double, triple integral to find the area and volume   | K3 |  |
|   |   | CO5   | Apply the Beta and gamma function to solve the multiple   | K4 |  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |    |  |
| 3   | Core 3 :<br>ALLIED<br>PHYSICS I                 | Semester I  |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | 1   | Understand and define the laws involved in gravitation and  | K2 |  |
|   |   | 2   | Develop the knowledge about heat and thermodynamics, sound  | K3 |  |
|   |   | 3   | Understand the concept of properties of matter and to recognize their applications in various real problems.                  | K4 |  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyse; K5 - Evaluate; K6 - Create</b> |   |    |  |
|   |   | K4  |   |    |  |
| 4   | Core 4 :<br>ANALYTICAL<br>GEOMETRY              | Semester II   |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Gain knowledge about the regular geometrical figures and properties.  | K1 |  |
|   |   | CO2   | Describe the geometric concepts.  | K2 |  |
|   |   | CO3   | Find equation to tangent, normal at a point on a conic  | K3 |  |
|   |   | CO4   | Analyze condition of tangency and find the tangent plane to   | K4 |  |
|   |   | CO5   | Analyze conics to explain natural phenomenon  | K4 |  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |   |   |   |    |  |
| 5   | Core 5 :<br>TRIGONOMETRY,<br>VECTOR<br>CALCULUS | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Know the expansion of trigonometric functions and   | K1 |  |
|   |   | CO2   | Acquire the basic knowledge of vector differentiation and   | K2 |  |
|   |   | CO3   | Determine and apply the important quantities associated with vector fields such as the divergence, curl and scalar potential. | K3 |  |



|   |  |   |  |    |
|---|--|---|--|----|
|   | CALCULUS AND FOURIER SERIES  | CO4   | Understand and find Fourier series of a given periodic   | K3 |
|   |  | CO5   | Examine line integral, surface integral, volume integral and inter-relations among them .                                | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |   |  |    |
| 6   | Core 6 : ALLIED PHYSICS II   | On the successful completion of the course, student will be able to:  |  |    |
|   |  | 1   | Acquire knowledge on basic concepts of photoelectric effect and fission, fusion and to get clear idea on wave mechanics. | K1 |
|   |  | 2   | Understand the features of Nuclear forces, photoelectric cells, semiconductor diodes, and their fundamental concepts.    | K2 |
|   |  | 3   | Understand the concept of Laser properties, digital electronics and to recognize their applications in real life.        | K4 |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b>                                   |  |    |
| 7   | Core 7 : ALLIED PHYSICS - LAB  | On the successful completion of the course, student will be able to:  |  |    |
|   |  | 1   | attain skill to understand the usage of basic laws and properties of the materials given.                                | K3 |
|   |  | 2   | analyze the characteristics of various diodes and construct  | K4 |
|   |  | 3   | acquire the knowledge of the potentiometer and apply it for  | K5 |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 -</b>  |  |    |
| 8   | Core 8 : DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS               | <b>Semester III</b>   |  |    |
|   |  | On the successful completion of the course, student will be able to:  |  |    |
|   |  | CO1   | Acquire knowledge to solve Differential and Partial  | K1 |
|   |  | CO2   | Solve higher order linear differential equations.  | K2 |
|   |  | CO3   | Expose differential equation as a powerful tool in solving problems in Physical and Social sciences.                     | K3 |
|   |  | CO4   | Demonstrate competency to solve linear PDE by  | K3 |
|   |  | CO5   | Analyze the concepts of Laplace transforms and inverse solve ODE with constant coefficients.                             | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |   |  |    |
| 9   | Core 9 : STATICS   | On the successful completion of the course, student will be able to:  |  |    |
|   |  | CO1   | Remember the various laws.   | K1 |
|   |  | CO2   | Understand the concepts of forces and moments.   | K2 |
|   |  | CO3   | Understand the concepts of equilibrium.  | K2 |
|   |  | CO 4  | Apply the concepts of forces and moments.  | K3 |
|   |  | CO 5  | Analyze the basics of coplanar forces, equilibrium of forces acting on a rigid body and solve the problems.              | K4 |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>   |  |    |
| Core 10 : ALLIED  | On the successful completion of the course, student will be able to: |   |  |    |
|   | 1  | Understand the properties metals and their conductivity, the synthesis and applications of boron compounds.                   | K1-K4  |    |
|   | 2  | Understand about silicones fuels gases and their industrial The theory behind colours and dyes, their preparation and dyeing. | K2-K4, K6  |    |

|  |                                |  |   |       |  |
|--|--------------------------------|--|---|-------|--|
| 10   | ALLIED CHEMISTRY I             | 3  | Understand the bonding and structure of various hydrocarbons and electronic effects. Appreciate the optical properties of the compounds nature itself | K1-K4 |  |
|  |                                | 4  | Explain the chemistry behind toiletries and cleaning agents.  | K2-K5 |  |
|  |                                | 5  | Understand the kinetics behind chemical reactions and the nature  | K1-K3 |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |   |       |  |
| 11   | Core 11: OPERATIONS RESEARCH I | CO 1   | Understand the basic concepts and application of fields.  | K1    |  |
|  |                                | CO 2   | Know principles of construction of mathematical models of   | K2    |  |
|  |                                | CO 3   | Analyze the relationship between a linear program and its   | K3    |  |
|  |                                | CO 4   | Apply techniques constructively to make effective problems in industry.   | K3    |  |
|  |                                | CO 5   | Build and solve transportation problems.  | K4    |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;             |   |       |  |
| 12   | Core 12: DYNAMICS              | <b>SEMESTER IV</b>   |   |       |  |
|  |                                | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | CO 1   | Remember the basic kinematics and dynamic concepts.   | K1    |  |
|  |                                | CO 2   | Describe the differential equation of Central Orbits .  | K2    |  |
|  |                                | CO 3   | Apply the concepts of projectiles to solve problems relating to the motion of a projectile.   | K3    |  |
|  |                                | CO 4   | To understand & apply the concepts of composition of simple harmonic motion in two directions.  | K3    |  |
|  |                                | CO 5   | Understand impulsive forces and analyze loss of K.E due to impact.  | K4    |  |
| K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; |                                |  |   |       |  |
| 13   | Core 13: PROGRAMMING IN C      | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | CO 1   | Remember the importance of C language and datatypes.  | K1    |  |
|  |                                | CO 2   | Understand the basic structure, operators and statements of   | K2    |  |
|  |                                | CO 3   | Understand decision control statements, loop control  | K2    |  |
|  |                                | CO 4   | Apply the concepts of data types, operators, expressions, control statements, arrays, character arrays and strings to                                 | K3    |  |
|  |                                | CO 5   | Read, understand and trace the execution of programs written  | K4    |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;             |   |       |  |
| 14   | Core 14: ALLIED CHEMISTRY II   | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | 1  | Appreciate the role of metals in biological system and their  | K1-K3 |  |
|  |                                | 2  | Understand about the importance of paints and the need for the bad face of war.   | K2-K5 |  |
|  |                                | 3  | Understand the importance of polymers and rubbers in our day to   | K1-K4 |  |
|  |                                | 4  | Appreciate the need for fertilizers and insecticides in the   | K2-K5 |  |
|  |                                | 5  | Understand the importance of electrochemistry and energy  | K2-K4 |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |   |       |  |

|    |  |   |  |       |
|----|--|---|--|-------|
| 15 | Core 15:<br>ALLIED<br>CHEMISTRY -- LAB           | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | 1   | Estimate the amount of ion present in the given solution through volumetric analysis                           | K1-K6 |
|    |  | 2   | Find the groups/elements and characters present in the given substance through qualitative analysis            | K1-K6 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |       |
| 16 | Core 16:<br>OPERATIONS<br>RESEARCH<br>- PAPER II | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Identify the importance of stocks, the reasons for holding determine the optimal order quantity for models .   | K1    |
|    |  | CO 2  | Explain the various costs related to inventory system.   | K2    |
|    |  | CO 3  | Apply game theory concepts to articulate real-world analyzing and practicing strategic decisions .             | K3    |
|    |  | CO 4  | Apply and extend queueing models to analyze real world   | K4    |
|    |  | CO 5  | Build and solve assignment model.  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
| 17 | Core 17:<br>REAL<br>ANALYSIS<br>I                | <b>SEMESTER V</b>   |  |       |
|    |  | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Remember the basic topological properties of subsets of the  | K1    |
|    |  | CO 2  | Understand the fundamental properties of the real numbers and analyze the real number system.                  | K2    |
|    |  | CO 3  | Learn the concept of limits, sequence, continuity, convergent sequence in metric spaces appreciating the       | K2    |
|    |  | CO 4  | Have the proficiency in the formulation and construction of proofs of basic results in real analysis.          | K3    |
|    |  | CO 5  | Demonstrate skills in communicating Mathematics and learn basic techniques and examples in analysis to be well | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
| 18 | Core 18:<br>COMPLEX<br>ANALYSIS<br>I             | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO1   | Learn techniques of complex analysis effectively to  | K1    |
|    |  | CO 2  | Recognize the simple and multiple connected domains.   | K2    |
|    |  | CO 3  | Investigate a function for its analyticity and find it series  | K3    |
|    |  | CO 4  | Examine the relationship between conformal mapping and   | K4    |
|    |  | CO 5  | Compute contour integrals directly and by the fundamental  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
| 19 | Core 19:<br>MODERN<br>ALGEBRA -<br>I             | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Recall the properties and extend group structure to finite   | K1    |
|    |  | CO 2  | Explain the concepts of homomorphism, isomorphism and  | K2    |
|    |  | CO 3  | Demonstrate abstract thinking capacity and ability to prove  | K3    |
|    |  | CO 4  | Compare features of different algebraic structures.  | K4    |
|    |  | CO 5  | Examine the properties of algebraic structures and their role  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |

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| 20 | Core 20:<br>DISCRETE<br>MATHEMATICS   | On the successful completion of the course, student will be able to:  |    |
|    | CO 1  | Assimilate various graph theoretic concepts and familiarize with their applications.                          | K1 |
|    | CO 2  | Know and understand about partially ordered sets, Boolean algebra, lattices and their types.                  | K2 |
|    | CO 3  | Apply Karnaugh map for simplifying the Boolean  | K3 |
|    | CO 4  | Demonstrate the skill to construct simple mathematical  | K4 |
|    | CO 5  | To achieve greater accuracy, clarity of thought and   | K4 |
|    | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |    |
|    |   |   |    |
| 21 | Core 21:<br>OPERATIONS<br>RESEARCH<br>– PAPER III   | On the successful completion of the course, student will be able to:  |    |
|    | CO 1  | Know the concept of simulation and simulate a queueing  | K1 |
|    | CO 2  | Understand the overall approach of dynamic programming.   | K2 |
|    | CO 3  | Solve nonlinear programming problems using Lagrange Kuhn-Tucker conditions.                                   | K2 |
|    | CO 4  | Apply concepts in optimal scheduling  | K3 |
|    | CO 5  | To formulate a model for solving the intractable problems.  | K4 |
|    | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |    |
|    |   |   |    |
| 22 | Core 22<br>REAL<br>ANALYSIS<br>II   | <b>SEMESTER VI</b>  |    |
|    | <b>On the successful completion of the course, student will be able to:</b>                 |   |    |
|    | CO 1  | <b>Demonstrate the understanding of continuity, uniform continuity, compactness, connectedness.</b>           | K1 |
|    | CO2   | <b>Understand partitions and their refinement.</b>  | K2 |
|    | CO 3  | <b>Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function.</b>     | K2 |
|    | CO 4  | <b>Examine the derivatives of function.</b>   | K3 |
|    | CO 5  | <b>Acquire skills in writing and analyze the proofs that arise in the context of real analysis.</b>           | K4 |
|    | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
|    |   |   |    |
| 23 | Core 23:<br>COMPLEX<br>ANALYSIS<br>II   | On the successful completion of the course, student will be able to:  |    |
|    | CO 1  | To recognize and apply the Liouville's theorem, the mean-value property of a function and the maximum modulus | K1 |
|    | CO 2  | Demonstrate understanding and appreciation of deeper aspects of complex analysis.                             | K2 |
|    | CO 3  | Apply residue theorem to compute integrals.   | K3 |
|    | CO 4  | Ability to think critically by proving mathematical conjectures and establishing theorems from complex        | K4 |
|    | CO 5  | Classify the nature of singularity, poles and residues .  | K2 |
|    | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |    |
|    |   |   |    |

|  |  |   |  |    |
|--|--|---|--|----|
| 24   | Core 24:<br>MODERN<br>ALGEBRA -<br>II            | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Communicate and understand mathematical ideas and  | K1 |
|  |  | CO 2  | Explain the concepts of base and dimension of Vector   | K2 |
|  |  | CO 3  | To apply the Gram-Schmidt process to construct an orthonormal set of vectors in an inner product space.      | K3 |
|  |  | CO 4  | Demonstrate competence with the basic ideas of Matrix Dual spaces, Linear transformation.                    | K3 |
|  |  | CO 5  | Have an insight to analyze a real life problem and solve it.   | K4 |
|  |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |    |
| 25   | Core 25<br>OPERATIONS<br>RESEARCH<br>- PAPER -IV | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Know the principles and applications of information theory.  | K1 |
|  |  | CO 2  | To understand sequencing, replacement problems.  | K2 |
|  |  | CO 3  | Demonstrate skills to achieve their objective using  | K3 |
|  |  | CO 4  | Apply decision making under different business   | K4 |
|  |  | CO 5  | Determine a solution to a rectangular game using simplex   | K3 |
|  |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |    |
| 26   | Elective 1:<br>NUMERICAL<br>METHODS -<br>I       | <b>Elective</b>   |  |    |
|  |  | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Remember the concepts of errors and its effect on  | K1 |
|  |  | CO 2  | Obtain numerical solutions of algebraic and transcendental   | K2 |
|  |  | CO 3  | Apply the finite difference and interpolation concepts.  | K3 |
|  |  | CO 4  | Develop skills in designing mathematical models for constructing polynomials to the given data and drawing   | K4 |
|  |  | CO 5  | Analyze the efficiency of iteration methods.   | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>      |  |   |  |    |
| 27   | Elective 2:<br>Numerical<br>Methods II           | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Familiarize with numerical integration and differentiation, ordinary differential equations.                 | K1 |
|  |  | CO 2  | Distinguish methods of Taylor series, Euler's, Modified methods to find solutions of differential equations. | K2 |
|  |  | CO 3  | Apply the techniques for enormous application in the fields of Engineering.                                  | K3 |
|  |  | CO 4  | Compute the integrals and derivatives by using the   | K4 |
|  |  | CO 5  | Find the numerical solution of second order O.D.E by   | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 -</b> |  |   |  |    |
| 28   | Elective 3<br>PROGRAMMING IN<br>C++              | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Know about class structure, member functions & data and example problems .                                   | K1 |
|  |  | CO 2  | Understand how C++ improves C with object-oriented   | K2 |
|  |  | CO 3  | Develop programming skills.  | K2 |

|   |      |   |    |
|---|------|---|----|
|   | CO 4 | To make use of objects and classes for developing | K3 |
|   | CO 5 | Build C++ classes.                                | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |      |   |    |

**PROVIDENCE COLLEGE FOR WOMEN**  
**DEPARTMENT OF MATHEMATICS**  
M.Sc Mathematics 2022-2023

| <b>Program Specific Outcomes (PSOs)</b>  |  |
|--|--|
| After the successful completion of <b>M. Sc. Mathematics</b> program, the students are expected to |  |
| PSO1   | Communicate concepts of Mathematics and its applications.  |
| PSO2   | Acquire analytical and logical thinking through various mathematical tools and techniques.   |
| PSO3   | Investigate real life problems and learn to solve them through formulating mathematical models.  |
| PSO4   | Attain in-depth knowledge to pursue higher studies and ability to conduct research.<br>Work as mathematical professional.  |
| PSO5   | Achieve targets of successfully clearing various examinations/interviews for placements in teaching, banks, industries and various other organizations/services. |

| <b>Program Outcomes (POs)</b>  |   |
|--|---|
| On successful completion of the M. Sc. Mathematics program, the students will be able to |   |
| PO1  | Demonstrate in-depth knowledge of Mathematics, both in theory and application.  |
| PO2  | Attain the ability to identify, formulate and solve challenging problems in Mathematics.  |
| PO3  | Know the various specialized areas of advanced mathematics and its applications.  |
| PO4  | Analyze complex problems in Mathematics and propose solutions using research-based knowledge.   |
| PO5  | Obtain the accurate solutions for the community oriented problems via various mathematical models.  |
| PO6  | Work individually or as a team member or leader in uniform and multidisciplinary settings.  |
| PO7  | Crack lectureship and fellowship exams affirmed by UGC like CSIR-NET and SET.   |
| PO8  | Apply the Mathematical concepts, in all the fields of learning including higher research, and recognize the need and prepare for lifelong learning. |
| PO9  | Know the use of computers both as an aid and as a tool to study problems in Mathematics.  |
| PO10   | Inculcate the knowledge of formulation and apply the mathematical concepts which are suitable for real life applications.                           |





**PG & RESEARCH DEPARTMENT OF ENGLISH**  
**PROGRAMME OUTCOME & PROGRAMME SPECIFIC OUTCOME**  
**2021- 2022**

**PROGRAMME OUTCOME BA ENGLISH LITERATURE**

**Programme outcome of Part II English**

On successful completion of the Part II English programme students will be able to:

- PO1: Prove language skills through effective communication.
- PO2: Imbibe better understanding of the usage of the English language.
- PO3: Evaluate the skills of communication through the activities and exercises given.
- PO4: Apply the acquired skills in day to day life usage.
- PO5: Demonstrate good fluency and competency in the chosen career.
- PO6: Prove his proficiency in LSRW skills
- PO7: Develop communicative skills
- PO8: Establish communicative competence in personal circumstances.
- PO9: Express appropriate thoughts and ideas in formal and informal communication.
- PO10: Evaluate language in written communication.

**Programme Specific Outcome**

On successful completion of the Part II programme students are expected to:

- PSO1: Develop in-depth knowledge and interest in the English language.
- PSO2: Analyse the requirements for effective communication.
- PSO3: Assess and improve the acquired skills.
- PSO4: Apply the gained knowledge in critical thinking.
- PSO5: Create competitive atmosphere in the established career.

**PG & RESEARCH DEPARTMENT OF ENGLISH**

**B.A ENGLISH LITERATURE**

**(With effect from 2021- 2022 only)**

**COURSE OUTCOME**

| <b>SN<br/>O</b> | <b>COURSE</b>                             | <b>COURSE OUTCOME</b>  |  |                  |
|-----------------|---|--|--|------------------|
| <b>1</b>        | <b>CORE I– PROSE I</b>                    | <b>1</b>   | <b>Comprehend prose passages</b>   | <b>K1, K2</b>    |
|                 |   | <b>2</b>   | <b>Enhance reading skills</b>  | <b>K2&amp;K3</b> |
|                 |   | <b>3</b>   | <b>Analyze the structure and style of Prose pieces</b>                   | <b>K4</b>        |
|                 |   | <b>4</b>   | <b>Create simple paragraphs</b>  | <b>K6</b>        |
|                 |   | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</b> |  |                  |
| <b>2</b>        | <b>CORE II– FICTION I</b>                 | <b>1</b>   | <b>Understand the plot, setting and structure</b>                        | <b>K2</b>        |
|                 |   | <b>2</b>   | <b>Identify the techniques used in Fictional writing</b>                 | <b>K3</b>        |
|                 |   | <b>3</b>   | <b>Analyse various themes in fiction</b>                                 | <b>K4</b>        |
|                 |   | <b>4</b>   | <b>Evaluate the role of major and minor characters</b>                   | <b>K5</b>        |
|                 |   | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</b> |  |                  |
| <b>3</b>        | <b>ALLIED I–SOCIAL HISTORY OF ENGLAND</b> | <b>1</b>   | <b>Understand the impact of society on Literature</b>                    | <b>K2</b>        |
|                 |   | <b>2</b>   | <b>Interlink the history of England with British English Literature</b>  | <b>K3</b>        |
|                 |   | <b>3</b>   | <b>Analyse the socio-cultural aspects of society on Literature</b>       | <b>K4</b>        |
|                 |   | <b>4</b>   | <b>Evaluate the literary works by considering its historical aspects</b> | <b>K5</b>        |
|                 |   |  |  |                  |

|          |   |   |  |          |   |           |          |  |           |          |  |           |          |  |           |
|----------|---|---|--|----------|---|-----------|----------|--|-----------|----------|--|-----------|----------|--|-----------|
|          |   | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</b>  |  |          |   |           |          |  |           |          |  |           |          |  |           |
| <b>4</b> | <b>COREIII– POETRY I</b>  | <table border="1"> <tr> <td><b>1</b></td> <td><b>Gain knowledge of poetry of different ages</b></td> <td><b>K1</b></td> </tr> <tr> <td><b>2</b></td> <td><b>Understand the literary terms and devices</b></td> <td><b>K2</b></td> </tr> <tr> <td><b>3</b></td> <td><b>Analyse a poem</b></td> <td><b>K4</b></td> </tr> <tr> <td><b>4</b></td> <td><b>Learn new dimensions in connecting emotions and languages and create simple Poems</b></td> <td><b>K6</b></td> </tr> </table> <p><b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</b></p>   |  | <b>1</b> | <b>Gain knowledge of poetry of different ages</b>   | <b>K1</b> | <b>2</b> | <b>Understand the literary terms and devices</b>                       | <b>K2</b> | <b>3</b> | <b>Analyse a poem</b>  | <b>K4</b> | <b>4</b> | <b>Learn new dimensions in connecting emotions and languages and create simple Poems</b> | <b>K6</b> |
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| <b>3</b> | <b>Analyse a poem</b>   | <b>K4</b>   |  |          |   |           |          |  |           |          |  |           |          |  |           |
| <b>4</b> | <b>Learn new dimensions in connecting emotions and languages and create simple Poems</b>    | <b>K6</b>   |  |          |   |           |          |  |           |          |  |           |          |  |           |
| <b>5</b> | <b>COREIV–DRAMA I</b>   | <table border="1"> <tr> <td><b>1</b></td> <td><b>Understand and enjoy reading plays</b></td> <td><b>K2</b></td> </tr> <tr> <td><b>2</b></td> <td><b>Identify the elements of Drama</b></td> <td><b>K3</b></td> </tr> <tr> <td><b>3</b></td> <td><b>Analyse plays thematically</b></td> <td><b>K4</b></td> </tr> <tr> <td><b>4</b></td> <td><b>Evaluate characters of the plays</b></td> <td><b>K5</b></td> </tr> </table> <p><b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</b></p>   |  | <b>1</b> | <b>Understand and enjoy reading plays</b>   | <b>K2</b> | <b>2</b> | <b>Identify the elements of Drama</b>                                  | <b>K3</b> | <b>3</b> | <b>Analyse plays thematically</b>                                | <b>K4</b> | <b>4</b> | <b>Evaluate characters of the plays</b>  | <b>K5</b> |
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| <b>7</b> | <b>COREV–PROSE II</b>   | <table border="1"> <tr> <td><b>1</b></td> <td><b>Gain knowledge on Prose writing</b></td> <td><b>K1</b></td> </tr> <tr> <td><b>2</b></td> <td><b>Identify the literary devices</b></td> <td><b>K3</b></td> </tr> </table>   |  | <b>1</b> | <b>Gain knowledge on Prose writing</b>  | <b>K1</b> | <b>2</b> | <b>Identify the literary devices</b>                                   | <b>K3</b> |          |  |           |          |  |           |
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| <b>2</b> | <b>Identify the literary devices</b>  | <b>K3</b>   |  |          |   |           |          |  |           |          |  |           |          |  |           |

|    |  |   |   |  |    |   |   |    |   |  |    |   |   |    |
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| 8  | COREVI-FICTION II  | <table border="1"> <tr> <td>1</td> <td>Understand the socio-cultural aspect of the society with the help of fiction</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Identify the literary elements in fiction</td> <td>K3</td> </tr> <tr> <td>3</td> <td>Analyse the plot, character and the techniques in the fiction</td> <td>K4</td> </tr> <tr> <td>4</td> <td>Evaluate the work of fiction contemporary Novelists</td> <td>K5</td> </tr> </table> <p>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</p> | 1 | Understand the socio-cultural aspect of the society with the help of fiction | K2 | 2 | Identify the literary elements in fiction         | K3 | 3 | Analyse the plot, character and the techniques in the fiction              | K4 | 4 | Evaluate the work of fiction contemporary Novelists | K5 |
| 1  | Understand the socio-cultural aspect of the society with the help of fiction | K2  |   |  |    |   |   |    |   |  |    |   |   |    |
| 2  | Identify the literary elements in fiction                                    | K3  |   |  |    |   |   |    |   |  |    |   |   |    |
| 3  | Analyse the plot, character and the techniques in the fiction                | K4  |   |  |    |   |   |    |   |  |    |   |   |    |
| 4  | Evaluate the work of fiction contemporary Novelists                          | K5  |   |  |    |   |   |    |   |  |    |   |   |    |
| 9  | ALLIED III-LITERARY FORMS  | <table border="1"> <tr> <td>1</td> <td>Understand different literary forms and their characteristics</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Differentiate various literary devices</td> <td>K4</td> </tr> <tr> <td>3</td> <td>Identify literary devices in a work, compare the genres and their features</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Attempt a simple creative writing</td> <td>K6</td> </tr> </table> <p>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</p>                        | 1 | Understand different literary forms and their characteristics                | K2 | 2 | Differentiate various literary devices            | K4 | 3 | Identify literary devices in a work, compare the genres and their features | K3 | 4 | Attempt a simple creative writing                   | K6 |
| 1  | Understand different literary forms and their characteristics                | K2  |   |  |    |   |   |    |   |  |    |   |   |    |
| 2  | Differentiate various literary devices                                       | K4  |   |  |    |   |   |    |   |  |    |   |   |    |
| 3  | Identify literary devices in a work, compare the genres and their features   | K3  |   |  |    |   |   |    |   |  |    |   |   |    |
| 4  | Attempt a simple creative writing  | K6  |   |  |    |   |   |    |   |  |    |   |   |    |
| 10 | COREVII-POETRY II  | <table border="1"> <tr> <td>1</td> <td>Gain intense knowledge of poetry</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand the literary importance of each poetry</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Critically analyse poems</td> <td>K4</td> </tr> <tr> <td>4</td> <td>Create simple poems by using literary devices</td> <td>K6</td> </tr> </table> <p>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</p>  | 1 | Gain intense knowledge of poetry   | K1 | 2 | Understand the literary importance of each poetry | K2 | 3 | Critically analyse poems   | K4 | 4 | Create simple poems by using literary devices       | K6 |
| 1  | Gain intense knowledge of poetry   | K1  |   |  |    |   |   |    |   |  |    |   |   |    |
| 2  | Understand the literary importance of each poetry                            | K2  |   |  |    |   |   |    |   |  |    |   |   |    |
| 3  | Critically analyse poems   | K4  |   |  |    |   |   |    |   |  |    |   |   |    |
| 4  | Create simple poems by using literary devices                                | K6  |   |  |    |   |   |    |   |  |    |   |   |    |

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| 11 | <b>COREVIII–DRAMA II</b>  | <table border="1"> <tr> <td data-bbox="646 226 695 310">1</td> <td data-bbox="695 226 1230 310">To carry in depth knowledge of plays</td> <td data-bbox="1230 226 1377 310">K2</td> </tr> <tr> <td data-bbox="646 310 695 394">2</td> <td data-bbox="695 310 1230 394">Analyse the literary devices used in plays</td> <td data-bbox="1230 310 1377 394">K4</td> </tr> <tr> <td data-bbox="646 394 695 436">3</td> <td data-bbox="695 394 1230 436">Critically evaluate the plays</td> <td data-bbox="1230 394 1377 436">K5</td> </tr> <tr> <td data-bbox="646 436 695 489">4</td> <td data-bbox="695 436 1230 489">Able to enact plays</td> <td data-bbox="1230 436 1377 489">K6</td> </tr> </table> <p data-bbox="646 489 1377 558">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>  | 1 | To carry in depth knowledge of plays                             | K2 | 2 | Analyse the literary devices used in plays                                      | K4 | 3 | Critically evaluate the plays   | K5 | 4 | Able to enact plays   | K6 |
| 1  | To carry in depth knowledge of plays  | K2   |   |  |    |   |   |    |   |   |    |   |   |    |
| 2  | Analyse the literary devices used in plays                                      | K4   |   |  |    |   |   |    |   |   |    |   |   |    |
| 3  | Critically evaluate the plays   | K5   |   |  |    |   |   |    |   |   |    |   |   |    |
| 4  | Able to enact plays   | K6   |   |  |    |   |   |    |   |   |    |   |   |    |
| 12 | <b>ALLIED IV – LITERARY CRITICISM</b>   | <table border="1"> <tr> <td data-bbox="646 594 695 720">1</td> <td data-bbox="695 594 1230 720">Carry Knowledge of leading Critics and their method of criticism</td> <td data-bbox="1230 594 1377 720">K1</td> </tr> <tr> <td data-bbox="646 720 695 835">2</td> <td data-bbox="695 720 1230 835">Understand the different schools of criticism and their theories</td> <td data-bbox="1230 720 1377 835">K2</td> </tr> <tr> <td data-bbox="646 835 695 951">3</td> <td data-bbox="695 835 1230 951">Interconnect society, literature and literary criticism to analyse a text</td> <td data-bbox="1230 835 1377 951">K4</td> </tr> <tr> <td data-bbox="646 951 695 1035">4</td> <td data-bbox="695 951 1230 1035">Evaluate a literary text by applying the ideas of the critics</td> <td data-bbox="1230 951 1377 1035">K5</td> </tr> </table> <p data-bbox="646 1035 1377 1104">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p> | 1 | Carry Knowledge of leading Critics and their method of criticism | K1 | 2 | Understand the different schools of criticism and their theories                | K2 | 3 | Interconnect society, literature and literary criticism to analyse a text | K4 | 4 | Evaluate a literary text by applying the ideas of the critics | K5 |
| 1  | Carry Knowledge of leading Critics and their method of criticism                | K1   |   |  |    |   |   |    |   |   |    |   |   |    |
| 2  | Understand the different schools of criticism and their theories                | K2   |   |  |    |   |   |    |   |   |    |   |   |    |
| 3  | Interconnect society, literature and literary criticism to analyse a text       | K4   |   |  |    |   |   |    |   |   |    |   |   |    |
| 4  | Evaluate a literary text by applying the ideas of the critics                   | K5   |   |  |    |   |   |    |   |   |    |   |   |    |
| 13 | <b>CORE IX – SHAKESPEAR E I</b>   | <table border="1"> <tr> <td data-bbox="646 1224 695 1308">1</td> <td data-bbox="695 1224 1230 1308">Comprehend the plays of Shakespeare</td> <td data-bbox="1230 1224 1377 1308">K2</td> </tr> <tr> <td data-bbox="646 1308 695 1423">2</td> <td data-bbox="695 1308 1230 1423">Appreciate the nuances of Shakespeare’s Universality and its impact on readers.</td> <td data-bbox="1230 1308 1377 1423">K4</td> </tr> <tr> <td data-bbox="646 1423 695 1507">3</td> <td data-bbox="695 1423 1230 1507">Analyse the different types of plays and the devices used.</td> <td data-bbox="1230 1423 1377 1507">K3</td> </tr> <tr> <td data-bbox="646 1507 695 1591">4</td> <td data-bbox="695 1507 1230 1591">Evaluate the themes of different kinds of plays</td> <td data-bbox="1230 1507 1377 1591">K6</td> </tr> </table> <p data-bbox="646 1591 1377 1659">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>                       | 1 | Comprehend the plays of Shakespeare                              | K2 | 2 | Appreciate the nuances of Shakespeare’s Universality and its impact on readers. | K4 | 3 | Analyse the different types of plays and the devices used.                | K3 | 4 | Evaluate the themes of different kinds of plays               | K6 |
| 1  | Comprehend the plays of Shakespeare   | K2   |   |  |    |   |   |    |   |   |    |   |   |    |
| 2  | Appreciate the nuances of Shakespeare’s Universality and its impact on readers. | K4   |   |  |    |   |   |    |   |   |    |   |   |    |
| 3  | Analyse the different types of plays and the devices used.                      | K3   |   |  |    |   |   |    |   |   |    |   |   |    |
| 4  | Evaluate the themes of different kinds of plays                                 | K6   |   |  |    |   |   |    |   |   |    |   |   |    |

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| 14 | <b>COREX–INDIAN WRITING IN ENGLISH</b>  | <table border="1"> <tr> <td data-bbox="646 226 695 348">1</td> <td data-bbox="695 226 1240 348">Familiar with the prominent writers of Indian Writing in English</td> <td data-bbox="1240 226 1393 348">K2</td> </tr> <tr> <td data-bbox="646 348 695 428">2</td> <td data-bbox="695 348 1240 428">Compare Indian Writing in English with British Literature</td> <td data-bbox="1240 348 1393 428">K3</td> </tr> <tr> <td data-bbox="646 428 695 508">3</td> <td data-bbox="695 428 1240 508">Critically analyse the works of Indian Writing in English</td> <td data-bbox="1240 428 1393 508">K4</td> </tr> <tr> <td data-bbox="646 508 695 588">4</td> <td data-bbox="695 508 1240 588">Evaluate the social issues represented in the literary text</td> <td data-bbox="1240 508 1393 588">K6</td> </tr> </table> <p data-bbox="646 588 1393 663">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>   | 1 | Familiar with the prominent writers of Indian Writing in English            | K2 | 2 | Compare Indian Writing in English with British Literature                       | K3 | 3 | Critically analyse the works of Indian Writing in English  | K4 | 4 | Evaluate the social issues represented in the literary text          | K6 |
| 1  | Familiar with the prominent writers of Indian Writing in English                | K2   |   |   |    |   |   |    |   |  |    |   |  |    |
| 2  | Compare Indian Writing in English with British Literature                       | K3   |   |   |    |   |   |    |   |  |    |   |  |    |
| 3  | Critically analyse the works of Indian Writing in English                       | K4   |   |   |    |   |   |    |   |  |    |   |  |    |
| 4  | Evaluate the social issues represented in the literary text                     | K6   |   |   |    |   |   |    |   |  |    |   |  |    |
| 15 | <b>COREXI–AMERICAN LITERATURE</b>   | <table border="1"> <tr> <td data-bbox="646 699 695 821">1</td> <td data-bbox="695 699 1192 821">Understand the diverse group of American authors and their style of writing</td> <td data-bbox="1192 699 1334 821">K2</td> </tr> <tr> <td data-bbox="646 821 695 942">2</td> <td data-bbox="695 821 1192 942">Analyse the key ideas, representation of cultural events of historical periods.</td> <td data-bbox="1192 821 1334 942">K4</td> </tr> <tr> <td data-bbox="646 942 695 1064">3</td> <td data-bbox="695 942 1192 1064">Compare American Literature with Indian Writing in English</td> <td data-bbox="1192 942 1334 1064">K5</td> </tr> <tr> <td data-bbox="646 1064 695 1186">4</td> <td data-bbox="695 1064 1192 1186">Create a simple creative writing based on prescribed literary pieces</td> <td data-bbox="1192 1064 1334 1186">K6</td> </tr> </table> <p data-bbox="646 1186 1393 1251">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p> | 1 | Understand the diverse group of American authors and their style of writing | K2 | 2 | Analyse the key ideas, representation of cultural events of historical periods. | K4 | 3 | Compare American Literature with Indian Writing in English | K5 | 4 | Create a simple creative writing based on prescribed literary pieces | K6 |
| 1  | Understand the diverse group of American authors and their style of writing     | K2   |   |   |    |   |   |    |   |  |    |   |  |    |
| 2  | Analyse the key ideas, representation of cultural events of historical periods. | K4   |   |   |    |   |   |    |   |  |    |   |  |    |
| 3  | Compare American Literature with Indian Writing in English                      | K5   |   |   |    |   |   |    |   |  |    |   |  |    |
| 4  | Create a simple creative writing based on prescribed literary pieces            | K6   |   |   |    |   |   |    |   |  |    |   |  |    |
| 16 | <b>COREXII–COMMON WEALTH LITERATURE</b>   | <table border="1"> <tr> <td data-bbox="646 1287 695 1409">1</td> <td data-bbox="695 1287 1218 1409">Comprehend the works of prominent authors in commonwealth Literature</td> <td data-bbox="1218 1287 1383 1409">K2</td> </tr> <tr> <td data-bbox="646 1409 695 1488">2</td> <td data-bbox="695 1409 1218 1488">Compare the style of common wealth writing</td> <td data-bbox="1218 1409 1383 1488">K3</td> </tr> <tr> <td data-bbox="646 1488 695 1568">3</td> <td data-bbox="695 1488 1218 1568">Present critical analysis of prescribed literary works</td> <td data-bbox="1218 1488 1383 1568">K4</td> </tr> <tr> <td data-bbox="646 1568 695 1690">4</td> <td data-bbox="695 1568 1218 1690">Evaluate common wealth literature with the help of knowledge gained</td> <td data-bbox="1218 1568 1383 1690">K5</td> </tr> </table> <p data-bbox="646 1690 1393 1757">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>                                   | 1 | Comprehend the works of prominent authors in commonwealth Literature        | K2 | 2 | Compare the style of common wealth writing                                      | K3 | 3 | Present critical analysis of prescribed literary works     | K4 | 4 | Evaluate common wealth literature with the help of knowledge gained  | K5 |
| 1  | Comprehend the works of prominent authors in commonwealth Literature            | K2   |   |   |    |   |   |    |   |  |    |   |  |    |
| 2  | Compare the style of common wealth writing                                      | K3   |   |   |    |   |   |    |   |  |    |   |  |    |
| 3  | Present critical analysis of prescribed literary works                          | K4   |   |   |    |   |   |    |   |  |    |   |  |    |
| 4  | Evaluate common wealth literature with the help of knowledge gained             | K5   |   |   |    |   |   |    |   |  |    |   |  |    |

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| 17 | <b>ELECTIVE–I<br/>STUDY OF INDIAN<br/>THEATRE</b>  | <table border="1"> <tr> <td data-bbox="646 226 691 300">1</td> <td data-bbox="691 226 1159 300">Identify various dramatic traditions in India</td> <td data-bbox="1159 226 1227 300">K2</td> </tr> <tr> <td data-bbox="646 300 691 373">2</td> <td data-bbox="691 300 1159 373">Understand the history of Indian Theatre</td> <td data-bbox="1159 300 1227 373">K2</td> </tr> <tr> <td data-bbox="646 373 691 520">3</td> <td data-bbox="691 373 1159 520">Apply the concept of group activity to engage with drama creatively and critically</td> <td data-bbox="1159 373 1227 520">K3</td> </tr> <tr> <td data-bbox="646 520 691 636">4</td> <td data-bbox="691 520 1159 636">Understand and evaluate various styles of theatre</td> <td data-bbox="1159 520 1227 636">K5<br/>,<br/>K2</td> </tr> </table> <p data-bbox="646 636 1437 709">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>                   | 1 | Identify various dramatic traditions in India                        | K2 | 2 | Understand the history of Indian Theatre   | K2 | 3 | Apply the concept of group activity to engage with drama creatively and critically | K3        | 4 | Understand and evaluate various styles of theatre     | K5<br>,<br>K2 |
| 1  | Identify various dramatic traditions in India  | K2   |   |  |    |   |  |    |   |  |           |   |   |               |
| 2  | Understand the history of Indian Theatre   | K2   |   |  |    |   |  |    |   |  |           |   |   |               |
| 3  | Apply the concept of group activity to engage with drama creatively and critically         | K3   |   |  |    |   |  |    |   |  |           |   |   |               |
| 4  | Understand and evaluate various styles of theatre  | K5<br>,<br>K2  |   |  |    |   |  |    |   |  |           |   |   |               |
| 18 | <b>COREXIII–<br/>SHAKESPEARE II</b>  | <table border="1"> <tr> <td data-bbox="646 745 691 819">1</td> <td data-bbox="691 745 1263 819">Intensive knowledge on Shakespearean plays</td> <td data-bbox="1263 745 1385 819">K2</td> </tr> <tr> <td data-bbox="646 819 691 913">2</td> <td data-bbox="691 819 1263 913">Analyse the universal characterization of Shakespeare</td> <td data-bbox="1263 819 1385 913">K4</td> </tr> <tr> <td data-bbox="646 913 691 987">3</td> <td data-bbox="691 913 1263 987">Evaluate the versatile writings of Shakespeare</td> <td data-bbox="1263 913 1385 987">K2,<br/>K5</td> </tr> <tr> <td data-bbox="646 987 691 1081">4</td> <td data-bbox="691 987 1263 1081">Enact a scene from Shakespearean plays</td> <td data-bbox="1263 987 1385 1081">K3</td> </tr> </table> <p data-bbox="646 1081 1437 1150">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p>  | 1 | Intensive knowledge on Shakespearean plays                           | K2 | 2 | Analyse the universal characterization of Shakespeare                                      | K4 | 3 | Evaluate the versatile writings of Shakespeare                                     | K2,<br>K5 | 4 | Enact a scene from Shakespearean plays                | K3            |
| 1  | Intensive knowledge on Shakespearean plays   | K2   |   |  |    |   |  |    |   |  |           |   |   |               |
| 2  | Analyse the universal characterization of Shakespeare                                      | K4   |   |  |    |   |  |    |   |  |           |   |   |               |
| 3  | Evaluate the versatile writings of Shakespeare   | K2,<br>K5  |   |  |    |   |  |    |   |  |           |   |   |               |
| 4  | Enact a scene from Shakespearean plays   | K3   |   |  |    |   |  |    |   |  |           |   |   |               |
| 19 | <b>COREXIV–<br/>INTENSIVE<br/>STUDY OF<br/>AN<br/>AUTHOR</b>                               | <table border="1"> <tr> <td data-bbox="646 1186 691 1260">1</td> <td data-bbox="691 1186 1263 1260">Carry in-depth knowledge on Tagore’s writing and his literary style.</td> <td data-bbox="1263 1186 1385 1260">K2</td> </tr> <tr> <td data-bbox="646 1260 691 1354">2</td> <td data-bbox="691 1260 1263 1354">Analyse the social issues discussed in the works of Tagore</td> <td data-bbox="1263 1260 1385 1354">K4</td> </tr> <tr> <td data-bbox="646 1354 691 1428">3</td> <td data-bbox="691 1354 1263 1428">Evaluate Indianism in Tagore’s writing</td> <td data-bbox="1263 1354 1385 1428">K2, K5</td> </tr> <tr> <td data-bbox="646 1428 691 1522">4</td> <td data-bbox="691 1428 1263 1522">Compare the works of Tagore with other Indian writers</td> <td data-bbox="1263 1428 1385 1522">K3</td> </tr> </table> <p data-bbox="646 1522 1437 1598">K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create</p> | 1 | Carry in-depth knowledge on Tagore’s writing and his literary style. | K2 | 2 | Analyse the social issues discussed in the works of Tagore                                 | K4 | 3 | Evaluate Indianism in Tagore’s writing   | K2, K5    | 4 | Compare the works of Tagore with other Indian writers | K3            |
| 1  | Carry in-depth knowledge on Tagore’s writing and his literary style.                       | K2   |   |  |    |   |  |    |   |  |           |   |   |               |
| 2  | Analyse the social issues discussed in the works of Tagore                                 | K4   |   |  |    |   |  |    |   |  |           |   |   |               |
| 3  | Evaluate Indianism in Tagore’s writing   | K2, K5   |   |  |    |   |  |    |   |  |           |   |   |               |
| 4  | Compare the works of Tagore with other Indian writers                                      | K3   |   |  |    |   |  |    |   |  |           |   |   |               |
| 20 | <b>CORE XV–<br/>INDIANLITER<br/>ATUREIN<br/>ENGLISH<br/>TRANSLATION</b>                    | <table border="1"> <tr> <td data-bbox="646 1633 691 1707">1</td> <td data-bbox="691 1633 1239 1707">Understand translated works and its nuances.</td> <td data-bbox="1239 1633 1385 1707">K2</td> </tr> <tr> <td data-bbox="646 1707 691 1885">2</td> <td data-bbox="691 1707 1239 1885">Analyse the works with the help of literary theory, translate simple works of their mother</td> <td data-bbox="1239 1707 1385 1885">K3</td> </tr> </table>  | 1 | Understand translated works and its nuances.                         | K2 | 2 | Analyse the works with the help of literary theory, translate simple works of their mother | K3 |   |  |           |   |   |               |
| 1  | Understand translated works and its nuances.   | K2   |   |  |    |   |  |    |   |  |           |   |   |               |
| 2  | Analyse the works with the help of literary theory, translate simple works of their mother | K3   |   |  |    |   |  |    |   |  |           |   |   |               |

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|    |   |   | tongue into English Language                                     |    |
|    |   | 3   | Knowledge on the ethics and impact of translations in Literature | K4 |
|    |   | 4   | Compare regional literature with English Literature              | K5 |
|    |   | K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create |  |    |
| 21 | <b>ELECTIVE–II<br/>WRITING SKILLS</b>   | 1   | Remember and demonstrate writing skills                          | K1 |
|    |   | 2   | Understand the functions of Writing                              | K2 |
|    |   | 3   | Create ways of effective writing skills                          | K6 |
|    |   | 4   | Understand formal writing  | K1 |
|    |   | K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create |  |    |
| 22 | <b>ELECTIVE–III<br/>STUDYING NOVELS</b> | 1   | Understand and define types of novels                            | K2 |
|    |   | 2   | Identify plot types  | K1 |
|    |   | 3   | Analyse the meanings of novels using the elements of novel.      | K4 |
|    |   | 4   | Evaluate and compare different other novels                      | K5 |
|    |   | K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6–Create |  |    |



## **PROGRAMME OUTCOME M.A ENGLISH LITERATURE**

### **Programme Outcome MA English Literature**

On successful completion of the MA English Literature programme, students:

- PO1: Develop the understanding of society as literature reflects social life.
- PO2: Discover and experiment new techniques in analysing literary texts.
- PO3: Acquire sound communicative skills and use it in establishing a good career.
- PO4: Build creativity and apply it in writing.
- PO5: Create a better outlook of life from the learning experience.
- PO6: Utilize the avenues for skilled postgraduates as columnists and creative artists.

### **Programme Specific Outcome**

After successful completion of the MA English programme, the students are expected to:

- PSO1: Understand the genres, writings, movements and periods of English literature.
- PSO2: Acquire a sound knowledge of the periods of English Literature and writers
- PSO3: Demonstrate creative skills like translating classic regional literature.
- PSO4: Recall the learnt concepts and texts in clearing qualifying and competitive examinations.
- PSO5: Develop good communication skills
- PSO6: Select unexplored areas for research.
- PSO7: Show interest in the literatures of the world
- PSO8: Demonstrate translation skills by translating simple texts
- PSO9: Learn the important movements and theories in Literature
- PSO10: Make use of the experience of the morals and values learnt from literature in transforming society

PG & RESEARCH DEPARTMENT OF ENGLISH

M.A ENGLISH LITERATURE

(With effect from 2021 to 2022 only)

COURSE OUTCOME

| SNO  | COURSE   | COURSE OUTCOME |   |    |
|--|--|----------------|---|----|
| 1  | Paper I - BRITISH LITERATURE – I<br>(FROM<br>CHAUCER TO MILTON | 1              | Understand the language and literature of the period                        | K2 |
|  |  | 2              | Analyse the social life and its reflection in the literary texts of the age | K4 |
|  |  | 3              | Remember the prominent works of the classical writers                       | K1 |
|  |  | 4              | Apply the features of the different literary forms to the prescribed texts  | K3 |
|  |  | 5              | Evaluate the technical aspects in the given texts                           | K5 |
|  |  |                |   |    |
| <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |                |   |    |
| 2  | Paper II - AMERICAN LITERATURE                                 | 1              | Understand the American outlook as seen in the prescribed texts             | K2 |
|  |  | 2              | Analyse works of literature, its forms and features in the American context | K4 |
|  |  | 3              | Remember the writers and the period to which they belonged                  | K1 |
|  |  | 4              | Apply critical theories to contemporary American texts                      | K3 |
|  |  | 5              | Evaluate the works of writers from a researcher's perspective               | K5 |
|  |  |                |   |    |
| <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |  |                |   |    |

|   |  |   |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
|---|--|---|---|--|----|---|--|----|---|---|----|---|---|----|---|--|----|--|--|--|
| 3 | Paper III – SHAKESPEARE  | <table border="1"> <tr> <td data-bbox="844 226 893 338">1</td> <td data-bbox="893 226 1360 338">Understand the language and techniques in the plays of Shakespeare</td> <td data-bbox="1360 226 1429 338">K1</td> </tr> <tr> <td data-bbox="844 338 893 449">2</td> <td data-bbox="893 338 1360 449">Create a better society from the morals and lessons learnt through the texts</td> <td data-bbox="1360 338 1429 449">K6</td> </tr> <tr> <td data-bbox="844 449 893 522">3</td> <td data-bbox="893 449 1360 522">Identify characters and lines from the texts prescribed</td> <td data-bbox="1360 449 1429 522">K2</td> </tr> <tr> <td data-bbox="844 522 893 596">4</td> <td data-bbox="893 522 1360 596">Apply literary theories to any given Shakespearean text</td> <td data-bbox="1360 522 1429 596">K3</td> </tr> <tr> <td data-bbox="844 596 893 707">5</td> <td data-bbox="893 596 1360 707">Compare the literature of the Elizabethan era with that of another</td> <td data-bbox="1360 596 1429 707">K5</td> </tr> <tr> <td data-bbox="844 707 1429 747"></td> <td data-bbox="844 707 1429 747"></td> <td data-bbox="844 707 1429 747"></td> </tr> </table> <p data-bbox="844 747 1429 856"><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> | 1 | Understand the language and techniques in the plays of Shakespeare | K1 | 2 | Create a better society from the morals and lessons learnt through the texts | K6 | 3 | Identify characters and lines from the texts prescribed | K2 | 4 | Apply literary theories to any given Shakespearean text | K3 | 5 | Compare the literature of the Elizabethan era with that of another | K5 |  |  |  |
| 1 | Understand the language and techniques in the plays of Shakespeare           | K1  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 2 | Create a better society from the morals and lessons learnt through the texts | K6  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 3 | Identify characters and lines from the texts prescribed                      | K2  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 4 | Apply literary theories to any given Shakespearean text                      | K3  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 5 | Compare the literature of the Elizabethan era with that of another           | K5  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
|   |  |   |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 4 | Paper IV- GRAMMAR FOR COMMUNICATION  | <table border="1"> <tr> <td data-bbox="844 892 893 966">1</td> <td data-bbox="893 892 1360 966">Understand the need and right usage of grammar</td> <td data-bbox="1360 892 1429 966">K2</td> </tr> <tr> <td data-bbox="844 966 893 1077">2</td> <td data-bbox="893 966 1360 1077">Remember the basic rules in grammar for effective communication</td> <td data-bbox="1360 966 1429 1077">K1</td> </tr> <tr> <td data-bbox="844 1077 893 1150">3</td> <td data-bbox="893 1077 1360 1150">Construct good passages without errors</td> <td data-bbox="1360 1077 1429 1150">K6</td> </tr> <tr> <td data-bbox="844 1150 893 1224">4</td> <td data-bbox="893 1150 1360 1224">Apply their theoretical knowledge in practice</td> <td data-bbox="1360 1150 1429 1224">K3</td> </tr> <tr> <td data-bbox="844 1224 893 1297">5</td> <td data-bbox="893 1224 1360 1297">Discover opportunities that suit their skills</td> <td data-bbox="1360 1224 1429 1297">K4</td> </tr> <tr> <td data-bbox="844 1297 1429 1337"></td> <td data-bbox="844 1297 1429 1337"></td> <td data-bbox="844 1297 1429 1337"></td> </tr> </table> <p data-bbox="844 1337 1429 1451"><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>   | 1 | Understand the need and right usage of grammar                     | K2 | 2 | Remember the basic rules in grammar for effective communication              | K1 | 3 | Construct good passages without errors                  | K6 | 4 | Apply their theoretical knowledge in practice           | K3 | 5 | Discover opportunities that suit their skills                      | K4 |  |  |  |
| 1 | Understand the need and right usage of grammar                               | K2  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 2 | Remember the basic rules in grammar for effective communication              | K1  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 3 | Construct good passages without errors                                       | K6  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 4 | Apply their theoretical knowledge in practice                                | K3  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
| 5 | Discover opportunities that suit their skills                                | K4  |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |
|   |  |   |   |  |    |   |  |    |   |   |    |   |   |    |   |  |    |  |  |  |

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|---|---|--|---|---|----|---|--|----|---|---|----|---|--|----|---|--|----|--|--|--|
| 5 | Paper V -THE ENGLISH LANGUAGE – I   | <table border="1"> <tr> <td data-bbox="846 226 894 302">1</td> <td data-bbox="894 226 1360 302">Understand the importance of pronunciation</td> <td data-bbox="1360 226 1429 302">K2</td> </tr> <tr> <td data-bbox="846 302 894 375">2</td> <td data-bbox="894 302 1360 375">Apply the rules to articulate sounds</td> <td data-bbox="1360 302 1429 375">K3</td> </tr> <tr> <td data-bbox="846 375 894 449">3</td> <td data-bbox="894 375 1360 449">Distinguish sounds and use them appropriately</td> <td data-bbox="1360 375 1429 449">K4</td> </tr> <tr> <td data-bbox="846 449 894 558">4</td> <td data-bbox="894 449 1360 558">Evaluate the learning of sounds through simple methods</td> <td data-bbox="1360 449 1429 558">K5</td> </tr> <tr> <td data-bbox="846 558 894 632">5</td> <td data-bbox="894 558 1360 632">Create opportunities with the accomplished competency</td> <td data-bbox="1360 558 1429 632">K6</td> </tr> <tr> <td data-bbox="846 632 894 674"></td> <td data-bbox="894 632 1360 674"></td> <td data-bbox="1360 632 1429 674"></td> </tr> </table> <p data-bbox="846 674 1429 785"><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>  | 1 | Understand the importance of pronunciation            | K2 | 2 | Apply the rules to articulate sounds                                     | K3 | 3 | Distinguish sounds and use them appropriately   | K4 | 4 | Evaluate the learning of sounds through simple methods | K5 | 5 | Create opportunities with the accomplished competency                      | K6 |  |  |  |
| 1 | Understand the importance of pronunciation  | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2 | Apply the rules to articulate sounds  | K3   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3 | Distinguish sounds and use them appropriately   | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4 | Evaluate the learning of sounds through simple methods  | K5   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5 | Create opportunities with the accomplished competency   | K6   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
|   |   |  |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 6 | Elective I<br>SURVEY OF LITERATURES IN ENGLISH-<br>BRITISH LITERATURE                         | <table border="1"> <tr> <td data-bbox="846 821 894 894">1</td> <td data-bbox="894 821 1360 894">Understand literatures from fundamentals to till date</td> <td data-bbox="1360 821 1429 894">K2</td> </tr> <tr> <td data-bbox="846 894 894 1003">2</td> <td data-bbox="894 894 1360 1003">Remember the basic concepts in literature to face competitive exams</td> <td data-bbox="1360 894 1429 1003">K1</td> </tr> <tr> <td data-bbox="846 1003 894 1157">3</td> <td data-bbox="894 1003 1360 1157">Create opportunities to study the development of trends in drama, poetry, prose and criticism</td> <td data-bbox="1360 1003 1429 1157">K6</td> </tr> <tr> <td data-bbox="846 1157 894 1230">4</td> <td data-bbox="894 1157 1360 1230">Evaluate literatures of different periods and nations</td> <td data-bbox="1360 1157 1429 1230">K5</td> </tr> <tr> <td data-bbox="846 1230 894 1346">5</td> <td data-bbox="894 1230 1360 1346">Analyse a wide range of literature referring to theme, structure and style</td> <td data-bbox="1360 1230 1429 1346">K4</td> </tr> <tr> <td data-bbox="846 1346 894 1388"></td> <td data-bbox="894 1346 1360 1388"></td> <td data-bbox="1360 1346 1429 1388"></td> </tr> </table> <p data-bbox="846 1388 1429 1528"><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> | 1 | Understand literatures from fundamentals to till date | K2 | 2 | Remember the basic concepts in literature to face competitive exams      | K1 | 3 | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6 | 4 | Evaluate literatures of different periods and nations  | K5 | 5 | Analyse a wide range of literature referring to theme, structure and style | K4 |  |  |  |
| 1 | Understand literatures from fundamentals to till date   | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2 | Remember the basic concepts in literature to face competitive exams                           | K1   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3 | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4 | Evaluate literatures of different periods and nations   | K5   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5 | Analyse a wide range of literature referring to theme, structure and style                    | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
|   |   |  |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 7 | Paper VI - BRITISH LITERATURE – II (DRYDEN TO ROMANTIC AGE)                                   | <table border="1"> <tr> <td data-bbox="846 1564 894 1638">1</td> <td data-bbox="894 1564 1360 1638">List the writers and the works of the period</td> <td data-bbox="1360 1564 1429 1638">K1</td> </tr> <tr> <td data-bbox="846 1638 894 1747">2</td> <td data-bbox="894 1638 1360 1747">Interpret any work with a clear understanding of the features of the age</td> <td data-bbox="1360 1638 1429 1747">K2</td> </tr> <tr> <td data-bbox="846 1747 894 1820">3</td> <td data-bbox="894 1747 1360 1820">Identify new areas of study and apply the theories learnt</td> <td data-bbox="1360 1747 1429 1820">K3</td> </tr> <tr> <td data-bbox="846 1820 894 1894">4</td> <td data-bbox="894 1820 1360 1894">Simplify the prescribed texts for better understanding</td> <td data-bbox="1360 1820 1429 1894">K4</td> </tr> </table>   | 1 | List the writers and the works of the period          | K1 | 2 | Interpret any work with a clear understanding of the features of the age | K2 | 3 | Identify new areas of study and apply the theories learnt                                     | K3 | 4 | Simplify the prescribed texts for better understanding | K4 |   |  |    |  |  |  |
| 1 | List the writers and the works of the period  | K1   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2 | Interpret any work with a clear understanding of the features of the age                      | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3 | Identify new areas of study and apply the theories learnt                                     | K3   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4 | Simplify the prescribed texts for better understanding  | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |  |    |  |  |  |

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|----|--|--|---|----|
|    |  | 5  | Justify the understanding of the writers through projects and assignments           | K5 |
|    |  |  |   |    |
|    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| 8  | Paper VII - INDIAN WRITING IN ENGLISH                            | 1  | Understand the writers and works of different periods from the Indian point of view | K2 |
|    |  | 2  | Identify the context and get a clear picture of Indian life portrayed in the works  | K3 |
|    |  | 3  | Analyse any given work from a critical perspective                                  | K4 |
|    |  | 4  | Assess the quality of literature produced from the subcontinent                     | K5 |
|    |  | 5  | Develop a research mind to explore new areas for research                           | K6 |
|    |  |  |   |    |
|    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| 9  | Paper VIII - ENGLISH LITERATURE FOR COMPETITIVE EXAMINATIONS – I | 1  | Remember the literary terms forms and theories                                      | K1 |
|    |  | 2  | Understand the different periods of English literature                              | K2 |
|    |  | 3  | Apply the learnt theories to any text   | K3 |
|    |  | 4  | Analyse any given text thematically and technically                                 | K4 |
|    |  | 5  | Interpret any literary piece of work  | K5 |
|    |  |  |   |    |
|    |  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| 10 | Paper IX – NEW LITERATURES IN ENGLISH                            | 1  | Choose texts from different   | K1 |

|    |   |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|----|---|---|---|---|----|---|---|----|---|---|----|---|--|----|---|--|----|--|--|--|
|    |   | <table border="1"> <tbody> <tr> <td></td> <td>parts of the world and understand the background of that literature</td> <td></td> </tr> <tr> <td>2</td> <td>Translate some of the texts into regional languages</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Apply the theories of comparative literature to study the literature of two different countries</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Analyse the texts from different perspectives</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Develop an interest in world literature</td> <td>K6</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> |   | parts of the world and understand the background of that literature |    | 2 | Translate some of the texts into regional languages                 | K2 | 3 | Apply the theories of comparative literature to study the literature of two different countries | K3 | 4 | Analyse the texts from different perspectives                          | K4 | 5 | Develop an interest in world literature                      | K6 |  |  |  |
|    | parts of the world and understand the background of that literature                             |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Translate some of the texts into regional languages   | K2  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Apply the theories of comparative literature to study the literature of two different countries | K3  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Analyse the texts from different perspectives   | K4  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Develop an interest in world literature   | K6  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 11 | Paper X - THE ENGLISH LANGUAGE – II   | <table border="1"> <tbody> <tr> <td>1</td> <td>Outline the history of the English language</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Summarize the growth of the English language</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Identify in the changes in the structure of the language down the years</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Make use of the knowledge gained to improve their communication skills</td> <td>K3</td> </tr> <tr> <td>5</td> <td>Select unexplored areas of the English language for research</td> <td>K5</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>       | 1 | Outline the history of the English language                         | K1 | 2 | Summarize the growth of the English language                        | K2 | 3 | Identify in the changes in the structure of the language down the years                         | K3 | 4 | Make use of the knowledge gained to improve their communication skills | K3 | 5 | Select unexplored areas of the English language for research | K5 |  |  |  |
| 1  | Outline the history of the English language   | K1  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Summarize the growth of the English language  | K2  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Identify in the changes in the structure of the language down the years                         | K3  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Make use of the knowledge gained to improve their communication skills                          | K3  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Select unexplored areas of the English language for research                                    | K5  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 12 | Elective II<br>SURVEY OF LITERATURES IN ENGLISH-AMERICAN LITERATURE                             | <table border="1"> <tbody> <tr> <td>1</td> <td>Understand literatures from fundamentals to till date</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Remember the basic concepts in literature to face competitive exams</td> <td>K1</td> </tr> <tr> <td>3</td> <td>Create opportunities to study the development of trends in</td> <td>K6</td> </tr> </tbody> </table>  | 1 | Understand literatures from fundamentals to till date               | K2 | 2 | Remember the basic concepts in literature to face competitive exams | K1 | 3 | Create opportunities to study the development of trends in                                      | K6 |   |  |    |   |  |    |  |  |  |
| 1  | Understand literatures from fundamentals to till date   | K2  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Remember the basic concepts in literature to face competitive exams                             | K1  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Create opportunities to study the development of trends in                                      | K6  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |

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|    |  |   | drama, poetry, prose and criticism   |    |
|    |  | 4 | Evaluate literatures of different periods and nations  | K5 |
|    |  | 5 | Analyse a wide range of literature referring to theme, structure and style   | K4 |
|    |  |   |  |    |
|    |  |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| 13 | Paper XI - BRITISH LITERATURE – III (FROM THE VICTORIAN AGE TO THE MODERN AGE) |   |  |    |
|    |  | 1 | Remember the writers and works of the periods  | K1 |
|    |  | 2 | Understand the shift in thought and techniques from the Victorian to the modern period   | K2 |
|    |  | 3 | Apply the theories of the age to the prescribed texts  | K3 |
|    |  | 4 | Analyse any literary work keeping in mind the age and its features   | K4 |
|    |  | 5 | Identify areas for research  | K3 |
|    |  |   |  |    |
|    |  |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| 14 | Paper XII - ENGLISH LITERATURE FOR COMPETITIVE EXAMINATIONS – II               |   |  |    |
|    |  | 1 | Remember the literary terms forms and theories   | K1 |
|    |  | 2 | Understand the different periods of English literature   | K2 |
|    |  | 3 | Apply the learnt theories to any text  | K3 |
|    |  | 4 | Analyse any given text thematically and technically  | K4 |
|    |  | 5 | Interpret any literary piece of work   | K5 |
|    |  |   |  |    |
|    |  |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |    |
| 15 | Paper XIII - METHODS OF  |   |  |    |

|    |   |  |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
|----|---|--|---|---|----|---|---|----|---|--|----|---|--|----|---|---|----|--|--|--|---|
|    | TEACHING ENGLISH  | <table border="1"> <tr> <td data-bbox="844 191 894 302">1</td> <td data-bbox="894 191 1360 302">Remember the various methods and its significance in effective teaching</td> <td data-bbox="1360 191 1437 302">K1</td> </tr> <tr> <td data-bbox="844 302 894 373">2</td> <td data-bbox="894 302 1360 373">Understand the importance of following the different methods</td> <td data-bbox="1360 302 1437 373">K2</td> </tr> <tr> <td data-bbox="844 373 894 447">3</td> <td data-bbox="894 373 1360 447">Apply the learnt methods into practice</td> <td data-bbox="1360 373 1437 447">K3</td> </tr> <tr> <td data-bbox="844 447 894 558">4</td> <td data-bbox="894 447 1360 558">Analyse ways to improve the methods for better understanding</td> <td data-bbox="1360 447 1437 558">K4</td> </tr> <tr> <td data-bbox="844 558 894 632">5</td> <td data-bbox="894 558 1360 632">Create innovative methods for a complete understanding</td> <td data-bbox="1360 558 1437 632">K6</td> </tr> <tr> <td data-bbox="844 632 894 678"></td> <td data-bbox="894 632 1360 678"></td> <td data-bbox="1360 632 1437 678"></td> </tr> </table>                                      | 1 | Remember the various methods and its significance in effective teaching | K1 | 2 | Understand the importance of following the different methods      | K2 | 3 | Apply the learnt methods into practice           | K3 | 4 | Analyse ways to improve the methods for better understanding | K4 | 5 | Create innovative methods for a complete understanding    | K6 |  |  |  | <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> |
| 1  | Remember the various methods and its significance in effective teaching | K1   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 2  | Understand the importance of following the different methods            | K2   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 3  | Apply the learnt methods into practice                                  | K3   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 4  | Analyse ways to improve the methods for better understanding            | K4   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 5  | Create innovative methods for a complete understanding                  | K6   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
|    |   |  |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 16 | Paper XIV – LITERARY CRITICISM AND THEORY                               | <table border="1"> <tr> <td data-bbox="844 856 894 1003">1</td> <td data-bbox="894 856 1360 1003">Remember the theories and theorists of the different periods</td> <td data-bbox="1360 856 1437 1003">K1</td> </tr> <tr> <td data-bbox="844 1003 894 1115">2</td> <td data-bbox="894 1003 1360 1115">Understand the theories and the changes in outlook down the years</td> <td data-bbox="1360 1003 1437 1115">K2</td> </tr> <tr> <td data-bbox="844 1115 894 1188">3</td> <td data-bbox="894 1115 1360 1188">Apply the relevant theories to any literary text</td> <td data-bbox="1360 1115 1437 1188">K3</td> </tr> <tr> <td data-bbox="844 1188 894 1262">4</td> <td data-bbox="894 1188 1360 1262">Analyse a piece of literature from a critical perspective</td> <td data-bbox="1360 1188 1437 1262">K4</td> </tr> <tr> <td data-bbox="844 1262 894 1335">5</td> <td data-bbox="894 1262 1360 1335">Evaluate a work of art from the theoretical point of view</td> <td data-bbox="1360 1262 1437 1335">K5</td> </tr> <tr> <td data-bbox="844 1335 894 1381"></td> <td data-bbox="894 1335 1360 1381"></td> <td data-bbox="1360 1335 1437 1381"></td> </tr> </table> | 1 | Remember the theories and theorists of the different periods            | K1 | 2 | Understand the theories and the changes in outlook down the years | K2 | 3 | Apply the relevant theories to any literary text | K3 | 4 | Analyse a piece of literature from a critical perspective    | K4 | 5 | Evaluate a work of art from the theoretical point of view | K5 |  |  |  | <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b>– Create</p>  |
| 1  | Remember the theories and theorists of the different periods            | K1   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 2  | Understand the theories and the changes in outlook down the years       | K2   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 3  | Apply the relevant theories to any literary text                        | K3   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 4  | Analyse a piece of literature from a critical perspective               | K4   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 5  | Evaluate a work of art from the theoretical point of view               | K5   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
|    |   |  |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 17 | Paper XV - RESEARCH METHODOLOGY   | <table border="1"> <tr> <td data-bbox="844 1528 894 1640">1</td> <td data-bbox="894 1528 1360 1640">Remember the fundamentals of writing research papers</td> <td data-bbox="1360 1528 1437 1640">K1</td> </tr> <tr> <td data-bbox="844 1640 894 1713">2</td> <td data-bbox="894 1640 1360 1713">Understand what thesis writing is</td> <td data-bbox="1360 1640 1437 1713">K2</td> </tr> <tr> <td data-bbox="844 1713 894 1787">3</td> <td data-bbox="894 1713 1360 1787">Apply literary theories to research</td> <td data-bbox="1360 1713 1437 1787">K3</td> </tr> <tr> <td data-bbox="844 1787 894 1860">4</td> <td data-bbox="894 1787 1360 1860">Analyse texts from different perspectives</td> <td data-bbox="1360 1787 1437 1860">K4</td> </tr> <tr> <td data-bbox="844 1860 894 1898">5</td> <td data-bbox="894 1860 1360 1898">Improve the quality of</td> <td data-bbox="1360 1860 1437 1898">K6</td> </tr> </table>  | 1 | Remember the fundamentals of writing research papers                    | K1 | 2 | Understand what thesis writing is                                 | K2 | 3 | Apply literary theories to research              | K3 | 4 | Analyse texts from different perspectives                    | K4 | 5 | Improve the quality of                                    | K6 |  |  |  |   |
| 1  | Remember the fundamentals of writing research papers                    | K1   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 2  | Understand what thesis writing is                                       | K2   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 3  | Apply literary theories to research                                     | K3   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 4  | Analyse texts from different perspectives                               | K4   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |
| 5  | Improve the quality of  | K6   |   |   |    |   |   |    |   |  |    |   |  |    |   |   |    |  |  |  |   |



|    |   |  |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|----|---|--|---|--|----|---|---|----|---|---|----|---|--|----|---|--|----|--|--|--|
|    |   | <table border="1"> <tr> <td></td> <td>research through the knowledge gained</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>   |   | research through the knowledge gained                              |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    | research through the knowledge gained   |  |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |  |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 18 | ELECTIVE III<br>SURVEY OF LITERATURES IN ENGLISH-<br>INDIAN LITERATURE IN ENGLISH             | <table border="1"> <tr> <td>1</td> <td>Understand literatures from fundamentals to till date</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Remember the basic concepts in literature to face competitive exams</td> <td>K1</td> </tr> <tr> <td>3</td> <td>Create opportunities to study the development of trends in drama, poetry, prose and criticism</td> <td>K6</td> </tr> <tr> <td>4</td> <td>Evaluate literatures of different periods and nations</td> <td>K5</td> </tr> <tr> <td>5</td> <td>Analyse a wide range of literature referring to theme, structure and style</td> <td>K4</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> | 1 | Understand literatures from fundamentals to till date              | K2 | 2 | Remember the basic concepts in literature to face competitive exams | K1 | 3 | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6 | 4 | Evaluate literatures of different periods and nations                | K5 | 5 | Analyse a wide range of literature referring to theme, structure and style | K4 |  |  |  |
| 1  | Understand literatures from fundamentals to till date   | K2   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Remember the basic concepts in literature to face competitive exams                           | K1   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Evaluate literatures of different periods and nations   | K5   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Analyse a wide range of literature referring to theme, structure and style                    | K4   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |  |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 19 | Paper XVI - INTRODUCTION TO WOMEN'S STUDIES   | <table border="1"> <tr> <td>1</td> <td>Relate the writings of women from other parts of the world to ours</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Interpret the works of prominent women writers</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Experiment with different writings for research</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Survey the literature of different countries on the style and themes</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Choose and choose different areas for research from the knowledge gained</td> <td>K5</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>  | 1 | Relate the writings of women from other parts of the world to ours | K1 | 2 | Interpret the works of prominent women writers                      | K2 | 3 | Experiment with different writings for research   | K3 | 4 | Survey the literature of different countries on the style and themes | K4 | 5 | Choose and choose different areas for research from the knowledge gained   | K5 |  |  |  |
| 1  | Relate the writings of women from other parts of the world to ours                            | K1   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Interpret the works of prominent women writers  | K2   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Experiment with different writings for research   | K3   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Survey the literature of different countries on the style and themes                          | K4   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Choose and choose different areas for research from the knowledge gained                      | K5   |   |  |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
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|----|---|---|---|---|----|---|---|----|---|---|----|---|--|----|---|--|----|--|--|--|
|    |   | <p>Create</p>   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 20 | <p>Paper XVII – MASS COMMUNICATION AND JOURNALISM</p>   | <table border="1"> <tr> <td>1</td> <td>Understand various types of journalism and their importance</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Introduce and apply various processes and theories of communication</td> <td>K3</td> </tr> <tr> <td>3</td> <td>Analyse the revolution and growth of Indian radio, cinema, and mass media</td> <td></td> </tr> <tr> <td>4</td> <td>Evaluate the importance of public opinion and role of journalism in framing it</td> <td>K5</td> </tr> <tr> <td>5</td> <td>Introduce students to history and development of television industry</td> <td>K1</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p> | 1 | Understand various types of journalism and their importance | K2 | 2 | Introduce and apply various processes and theories of communication | K3 | 3 | Analyse the revolution and growth of Indian radio, cinema, and mass media                     |    | 4 | Evaluate the importance of public opinion and role of journalism in framing it | K5 | 5 | Introduce students to history and development of television industry       | K1 |  |  |  |
| 1  | Understand various types of journalism and their importance                                   | K2  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Introduce and apply various processes and theories of communication                           | K3  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Analyse the revolution and growth of Indian radio, cinema, and mass media                     |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Evaluate the importance of public opinion and role of journalism in framing it                | K5  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Introduce students to history and development of television industry                          | K1  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 21 | <p>Elective IV SURVEY OF LITERATURES IN ENGLISH- NEW LITERATURES IN ENGLISH</p>               | <table border="1"> <tr> <td>1</td> <td>Understand literatures from fundamentals to till date</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Remember the basic concepts in literature to face competitive exams</td> <td>K1</td> </tr> <tr> <td>3</td> <td>Create opportunities to study the development of trends in drama, poetry, prose and criticism</td> <td>K6</td> </tr> <tr> <td>4</td> <td>Evaluate literatures of different periods and nations</td> <td>K5</td> </tr> <tr> <td>5</td> <td>Analyse a wide range of literature referring to theme, structure and style</td> <td>K4</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>    | 1 | Understand literatures from fundamentals to till date       | K2 | 2 | Remember the basic concepts in literature to face competitive exams | K1 | 3 | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6 | 4 | Evaluate literatures of different periods and nations                          | K5 | 5 | Analyse a wide range of literature referring to theme, structure and style | K4 |  |  |  |
| 1  | Understand literatures from fundamentals to till date   | K2  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 2  | Remember the basic concepts in literature to face competitive exams                           | K1  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 3  | Create opportunities to study the development of trends in drama, poetry, prose and criticism | K6  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 4  | Evaluate literatures of different periods and nations   | K5  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
| 5  | Analyse a wide range of literature referring to theme, structure and style                    | K4  |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |
|    |   |   |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |  |  |  |

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|----|---|--|---|---|----|---|---|----|---|--|----|---|---|----|---|---|----|--|--|--|
| 22 | PROJECT WORK  | <table border="1"> <tr> <td data-bbox="846 235 894 340">1</td> <td data-bbox="901 235 1360 340">Evaluate a work of art critically employing a theory of criticism</td> <td data-bbox="1367 235 1432 340">K5</td> </tr> <tr> <td data-bbox="846 348 894 420">2</td> <td data-bbox="901 348 1360 420">Create an original thesis in their writing projects</td> <td data-bbox="1367 348 1432 420">K6</td> </tr> <tr> <td data-bbox="846 428 894 533">3</td> <td data-bbox="901 428 1360 533">Apply research methodology and incorporate source material into their thesis</td> <td data-bbox="1367 428 1432 533">K4</td> </tr> <tr> <td data-bbox="846 541 894 604">4</td> <td data-bbox="901 541 1360 604">Understand effective organizing strategies in writing</td> <td data-bbox="1367 541 1432 604">K2</td> </tr> <tr> <td data-bbox="846 613 894 793">5</td> <td data-bbox="901 613 1360 793">Evaluate the credibility of sources, to use academic/scholarly resources, and to incorporate sources effectively and ethically.</td> <td data-bbox="1367 613 1432 793">K5</td> </tr> <tr> <td data-bbox="846 802 894 823"></td> <td data-bbox="901 802 1360 823"></td> <td data-bbox="1367 802 1432 823"></td> </tr> </table> | 1 | Evaluate a work of art critically employing a theory of criticism | K5 | 2 | Create an original thesis in their writing projects | K6 | 3 | Apply research methodology and incorporate source material into their thesis | K4 | 4 | Understand effective organizing strategies in writing | K2 | 5 | Evaluate the credibility of sources, to use academic/scholarly resources, and to incorporate sources effectively and ethically. | K5 |  |  |  |
| 1  | Evaluate a work of art critically employing a theory of criticism   | K5   |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
| 2  | Create an original thesis in their writing projects   | K6   |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
| 3  | Apply research methodology and incorporate source material into their thesis  | K4   |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
| 4  | Understand effective organizing strategies in writing   | K2   |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
| 5  | Evaluate the credibility of sources, to use academic/scholarly resources, and to incorporate sources effectively and ethically. | K5   |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
|    |   |  |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |
|    |   | <p><b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create</p>  |   |   |    |   |   |    |   |  |    |   |   |    |   |   |    |  |  |  |

## **PROGRAMME OUTCOME OF PART II ENGLISH**

On successful completion of the Part II English programme students will be able to:

PO1: Prove language skills through effective communication.

PO2: Imbibe better understanding of the usage of the English language.

PO3: Evaluate the skills of communication through the activities and exercises given.

PO4: Apply the acquired skills in day to day life usage.

PO5: Demonstrate good fluency and competency in the chosen career.

### **Programme Specific Outcome**

On successful completion of the Part II programme students are expected to:

PSO1: Develop in-depth knowledge and interest in the English language.

PSO2: Analyse the requirements for effective communication.

PSO3: Assess and improve the acquired skills.

PSO4: Apply the gained knowledge in critical thinking.

PSO5: Create competitive atmosphere in the established career.

**PG & RESEARCH DEPARTMENT OF ENGLISH**

**PART II ENGLISH**

**COURSE OUTCOME**

**ALL B.A/B.SC, BCOM & BCA-PART II ENGLISH- PAPER I, II, III & IV**

**ALL B.A/B.SC- PART II ENGLISH- PAPER I, II**

| SNO | COURSE OUTCOME   |    |
|-----|--|----|
| 1   | Enhance the reading skills of students.                    | K1 |
| 2   | Understand the essence of literature.                      | K2 |
| 3   | Improve the writing skills and present ideas appropriately | K3 |
| 4   | Comprehend and interpret the text.                         | K4 |
| 5   | Comment on the literary works efficiently.                 | K5 |

**K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6–Create**

**PG & RESEARCH DEPARTMENT OF ENGLISH**

**PART IV**

**COURSE OUTCOME**

**2019-2022 BATCH**

| <b>SNO</b>   | <b>COURSE</b>   | <b>OUTCOME</b> |   |           |
|--|---|----------------|---|-----------|
| <b>1</b>   | <b>ENVIRONMENTAL STUDIES</b>  |                |   |           |
| <b>2</b>   | <b>VALUE EDUCATION- HUMAN RIGHTS</b>                                  |                |   |           |
| <b>3</b>   | <b>Skill Based Subject 1<br/>COMMUNICATIVE ENGLISH –<br/>Paper I</b>  | <b>SNO</b>     | <b>COURSE OUTCOME</b>   |           |
|  |   | <b>1</b>       | <b>Develop and remember vocabulary and improve the accuracy in grammar.</b>                         | <b>K1</b> |
|  |   | <b>2</b>       | <b>Analyse and produce words with right pronunciation</b>   | <b>K3</b> |
|  |   | <b>3</b>       | <b>Understand LSRW- listening, speaking, reading and writing skills and the related sub-skills.</b> | <b>K2</b> |
|  |   | <b>4</b>       | <b>Create and Demonstrate positive group communication exchanges</b>                                | <b>K6</b> |
| <b>K1-Remember; K2-Understand; K3 -Apply; K4-Analyze; K5-Evaluate; K6–Create</b> |   |                |   |           |
| <b>4</b>   | <b>Skill Based Subject 1<br/>COMMUNICATIVE ENGLISH –<br/>Paper II</b> | <b>SNO</b>     | <b>COURSE OUTCOME</b>   |           |
|  |   | <b>1</b>       | <b>Develop and remember vocabulary and improve the accuracy in grammar.</b>                         | <b>K1</b> |
|  |   | <b>2</b>       | <b>Analyse and produce words with right pronunciation</b>   | <b>K3</b> |
|  |   | <b>3</b>       | <b>Understand LSRW- listening, speaking, reading and writing skills and the related sub-skills.</b> | <b>K2</b> |
|  |   | <b>4</b>       | <b>Create and Demonstrate positive group communication exchanges</b>                                | <b>K6</b> |

|          |  |   |  |           |
|----------|--|---|--|-----------|
|          |  | <b>K1-Remember; K2-Understand; K3 -Apply; K4-<br/>A6analyze; K5-Evaluate; K6–Create</b> |  |           |
| <b>5</b> | <b>Skill Based Subject 1<br/>COMMUNICATIVE ENGLISH –<br/>Paper III</b> | <b>SNO</b>  | <b>COURSE OUTCOME</b>  |           |
|          |  | <b>1</b>  | <b>Develop and remember<br/>vocabulary and improve the<br/>accuracy in grammar.</b>              | <b>K1</b> |
|          |  | <b>2</b>  | <b>Apply the right way of<br/>pronunciation through the<br/>knowledge of phonetics</b>           | <b>K3</b> |
|          |  | <b>3</b>  | <b>Recognise and remember the<br/>meaning of new words based on<br/>contextual comprehension</b> | <b>K1</b> |
|          |  | <b>4</b>  | <b>Create and Demonstrate positive<br/>group communication exchanges</b>                         | <b>K6</b> |
|          |  | <b>K1-Remember; K2-Understand; K3 -Apply; K4-<br/>Analyze; K5-Evaluate; K6–Create</b>   |  |           |
| <b>6</b> | <b>Skill Based Subject 1<br/>COMMUNICATIVE ENGLISH –<br/>Paper IV</b>  | <b>SNO</b>  | <b>COURSE OUTCOME</b>  |           |
|          |  | <b>1</b>  | <b>Develop and remember<br/>vocabulary and improve the<br/>accuracy in grammar.</b>              | <b>K1</b> |
|          |  | <b>2</b>  | <b>Analyse and produce words with<br/>right pronunciation</b>                                    | <b>K3</b> |
|          |  | <b>3</b>  | <b>Understand Demonstrate the<br/>ability to speak publicly</b>                                  | <b>K1</b> |
|          |  | <b>4</b>  | <b>Create and Demonstrate reading<br/>skills.</b>  | <b>K6</b> |
|          |  | <b>K1-Remember; K2-Understand; K3 -Apply; K4-<br/>Analyze; K5-Evaluate; K6–Create</b>   |  |           |
|          |  |   |  |           |

**2020-2023 BATCH**

| <b>SNO</b>   | <b>COURSE</b>  | <b>OUTCOME</b>  |  |           |
|--|--|---|--|-----------|
| <b>1</b>   | <b>ENVIRONMENTAL STUDIES</b>                                       |   |  |           |
| <b>2</b>   | <b>VALUE EDUCATION- HUMAN RIGHTS</b>                               |   |  |           |
| <b>3</b>   | <b>JOB ORIENTED COURSE – PAPER I- Language skill I</b>             | <b>SNO</b>  | <b>COURSE OUTCOME</b>                      |           |
| <b>1</b>   |  | <b>Master framing sentence on different pattern</b>   | <b>K3</b>                                  |           |
| <b>2</b>   |  | <b>Apply grammar in Speaking and writing</b>  | <b>K3</b>                                  |           |
| <b>3</b>   |  | <b>Prepare and analyse grammatically correct passages</b>   | <b>K4</b>                                  |           |
| <b>4</b>   |  | <b>Present short features.</b>  | <b>K6</b>                                  |           |
|  |  |   |  |           |
| <b>K1-Remember; K2-Understand; K3 -Apply; K4-Analyze; K5-Evaluate; K6–Create</b> |  |   |  |           |
| <b>4</b>   | <b>JOB ORIENTED COURSE – PAPER II- Language skill II</b>           | <b>SNO</b>  | <b>COURSE OUTCOME</b>                      |           |
| <b>1</b>   |  | <b>Transform sentences into different kinds and learn synthesis &amp; transformation of sentences</b> | <b>K1</b>                                  |           |
| <b>2</b>   |  | <b>Apply grammar in LSRW</b>  | <b>K2</b>                                  |           |
| <b>3</b>   |  | <b>Analyse the usage of words, comprehend the writings and composition</b>                            | <b>K3</b>                                  |           |
| <b>4</b>   |  | <b>Adapt professional Writing</b>   | <b>K5</b>                                  |           |
| <b>K1-Remember; K2-Understand; K3 -Apply; K4-Analyze; K5-Evaluate; K6–Create</b> |  |   |  |           |
| <b>5</b>   | <b>VALUE ADDED COURSE – PAPER I- Study of English Phonetics- I</b> | <b>SNO</b>  | <b>COURSE OUTCOME</b>                      |           |
|  |  | <b>1</b>  | <b>Learn phonetics symbols with sounds</b> | <b>K1</b> |



|   |   |   |  |    |
|---|---|---|--|----|
|   |   | 2   | Use right accent and rhythm in speaking    | K2 |
|   |   | 3   | Analyze the syllable and accent            | K4 |
|   |   | 4   | Classify the speak sound                   | K5 |
|   |   | K1-Remember; K2-Understand; K3 -Apply; K4-Analyze; K5-Evaluate; K6–Create |  |    |
| 6 | VALUE ADDED COURSE – PAPER II- Study of English Phonetics- II | SNO   | COURSE OUTCOME                             |    |
|   |   | 1   | The concept of general Indian English      | K2 |
|   |   | 2   | Apply intonation accent rhythm in Speaking | K3 |
|   |   | 3   | Master phonetics symbols and sounds        | K4 |
|   |   | 4   | Transcript into Phonetic language          | K5 |
|   |   | K1-Remember; K2-Understand; K3 -Apply; K4-Analyze; K5-Evaluate; K6–Create |  |    |
|   |   |   |  |    |

## **DEPARTMENT OF BOTANY**

### **UG - BOTANY**

**Programme Outcomes (POs)** are narrow statements that describe what the students are expected to know and would be able to do upon the graduation. These relate to the skills, knowledge, and behavior that students acquire through the programme.

- The students could work in Research Institutes and raise useful crop varieties
- The students become an Entrepreneur in Nurseries, Green house farming and in tissue culture labs.
- The students become an Environmental Consultant and help in developing pollution – free environment.
- After completing the course, the student will be efficient in medical coding and become Pharmacognosy consultant and also help in developing new drugs.
- The students could be employed as Plant Biochemist and analyse biochemical processes with reference to plants, system.
- The students can become a farming consultant and thereby use his/her knowledge in scientifically improving the existing agriculture practices
- The students can become a farming consultant and thereby use his/her knowledge in scientifically improving the existing agriculture practices.
- The students become Plant Pathologist and analyse the pathogenesis of newly identified plant diseases and pests affecting the crops.
- The students become Plant Pathologist and analyse the pathogenesis of newly identified plant diseases and pests affecting the crops
- The students can become a good Geneticist and help in producing genetically modified plants to cater the needs of the society
- The students become Plant Explorer in identifying and classifying new species of plants and maintain a proper Herbarium of unexplored areas.
- The students get opportunities of becoming an efficient forest and park ranger, Herbarium keeper etc.

### **Programme Specific Outcomes (PSOs)**

The PSOs are programme specific. PSOs are written by the Department offering the programme. There are usually five to seven PSOs for a Department.

- Attaining subject knowledge in terms of individual course as well as holistic programme.
- Identify, classify and compare the features of different plant groups.
- Analytical reasoning through practical.
- Acquire knowledge about modern techniques in plant science.
- Able to present scientific hypothesis and data.

# DEPARTMENT OF BOTANY

## PG - BOTANY

### Program Specific Outcomes (PSOs)

After the successful completion of PG Botany program, the students will be to

- Gain knowledge about the classification of plants from cryptogams to phanerogams, identification of the plants in the field to do Study of biodiversity studies with respect to habitat & correlate with climate change, land and forest degradation. Apply of Botany in agriculture through study of phytopathology and Paleobotany to trace the evolution of plants.
- Identify and classify plants for further biochemical and pharmaceutical aspects through the subjects Morphology, Taxonomy, Anatomy, Embryology and Morphogenesis.
- To develop intellectual skills on biological data and data bases for analysis of relevant biological situation.
- To gain skills about the identification of local medicinal, rare endangered endemic and exotic species in their original habitats and to acquire the therapeutic values, their cultivation practices for effective conservation for future use.
- Identify genes responsible for stress tolerance and genetic engineering of plants through microbiology and inter-relate integral and ubiquitous role of microbes with their environment.

### Program Outcomes (POs)

**On successful completion of the M.Sc. Botany program the students will be able to**

- Maintain a high level of scientific excellence in botanical research with specific emphasis on the role of plants, create, select and apply appropriate techniques, resources and modern technology in all areas of plant sciences.

- Logically think and implement the modern biological innovations and techniques and apply them through practical knowledge gained in the fields of Molecular Biology, Plant Biotechnology and plant tissue culture.
- Understand the issues of environmental contexts and sustainable development in making the environment clean and in making remedies and solutions for polluted areas.
- Enhance the therapeutic aspects of medicinal plants by traditional indigenous approaches and improved production of supply on medicine, food and other plant products for the betterment of human's holistic development and welfare.
- Acquire amplifying knowledge on basic scientific phenomena, fundamental principles and applications of various mathematical and statical tools in relevant biological situations.
- Ability to execute their ideas, knowledge and concepts in current scenario.
- Develop effective communicative skill through seminars to successfully disseminate the biological knowledge which will facilitate the students to look for various avenues in Higher Education and also in participating and giving good results in competitive examinations.

## Department of Botany ( UG)

| Subject                                     | Course out come   |  |    |
|---|---|--|----|
| <b>Core I</b><br>Plant<br>diversit<br>y I   | On the successful completion of the course, students are able :   |  |    |
|   | To understand thallus organization, reproduction and classification of algae, structure and reproduction of Chlorophyceae members | K2   |    |
|   | To get clear idea about members of Bacillariophyceae, Phaeophyceae, Rhodophyceae and Cyanophyceae                                 | K2   |    |
|   | To learn the classification and salient features of fungi   | K4   |    |
|   | To overview the structure and reproduction of Lichens.  | K3   |    |
|   | To Implement knowledge on management of plant diseases to increase crop yield.  | K3   |    |
|   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create    |  |    |
| <b>Core II</b><br>Plant<br>diversit<br>y II | On the successful completion of the course, student are able to:  |  |    |
|   | 1   | Get an overview about classification of Bryophytes and their representative members.                                       | K2 |
|   | 2   | Gain in depth knowledge about Pteridophytes classification, evolution of stele and life cycle of Lycopodium and Equisetum. | K2 |
|   | 3   | Know about Heterospory and seed habit and life cycle of Dicranopteris and Marselia.  | K3 |
|   | 4   | Overall view about Gymnosperms and its type species.   | K2 |
|   | 5   | Understand Paleobotany, types of fossils and analysis of fossil age with few example..                                     | K4 |
|   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create    |  |    |

| Subject  | Department of botany( UG)<br>Course out come   |   |    |  |  |
|--|--|---|----|--|--|
| <b>Core I<br/>Microbiology</b>   | 1  | Understanding of research ethics involving microorganisms to contribute to application, advancement and impartment of knowledge in the field of microbiology and molecular biology globally. The laboratory training will empower them to prepare for careers in broad range fields.  | K1 |  |  |
|  | 2  | Knowledge of the leading edge in a chosen specialized area of Microbiology, based on own research experience from a master's project and international literature. Can compete in national level competitive exams such as NET-JRF or GATE or International exams such as GRE-TOEFEL and can pursue career in higher studies. | K2 |  |  |
|  | 3  | Develop ability to independently carry out a complete scientific work process, including the understanding of theoretical background, hypothesis generation, collection and analysis of data, and interpretation and presentation of results  | K3 |  |  |
|  | 4  | Is able to evaluate and apply relevant theory, methods and analytic approaches within the specialized field of microbiology, including statistical methods.   | K4 |  |  |
|  | 5  | Has high competence and multidisciplinary project experience within selected topics related to microbiology and ability to contribute in a multidisciplinary team.  | K5 |  |  |
|  | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |    |  |  |
| <b>Core Paper II</b>   | On the successful completion of the course, student will be able to:   |   |    |  |  |
|  | 1  | Grasp the basic concepts of lower life forms  | K1 |  |  |
|  | 2  | Understand the diversity in habits, habitats and organization of various groups of lower plants   | K2 |  |  |
|  | 3  | Inherit knowledge on the exploitation of useful products from lower forms for the betterment of human welfare   | K3 |  |  |
|  | 4  | Apply their acquired knowledge to improve the economic quality of the lower life forms.   | K4 |  |  |
| <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |   |    |  |  |
| <b>Core Paper III</b>  | 1  | Grasp the knowledge on phylogeny of Bryophytes, Pteridophytes and Gymnosperms.  | K1 |  |  |
|  | 2  | Assume the alternation of generations of Vascular Cryptogams and Phanerogams..  | K2 |  |  |
|  | 3  | Appeal the knowledge on identification of living fossils from the   | K3 |  |  |

|                        |  |   |    |
|------------------------|--|---|----|
|                        |  | fossils and the role of fossils in oil exploration and coal excavation.   |    |
|                        | 4  | Discriminate various kinds of fossilization process and Radio carbon dating.  | K4 |
|                        | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| <b>Core Paper IV</b>   | 1  | Comprise the concepts of ecosystem, biogeochemical cycle and species selection  | K1 |
|                        | 2  | Realize the environmental deterioration and possible measures for their revival   | K2 |
|                        | 3  | Appeal using modern techniques to conserve the species and natural resources. in modern techniques.   | K3 |
|                        | 4  | Monitor and register the biodiversity changes through remote sensing  | K4 |
|                        | 5  | Apply strategies for the conservation of Germplasm  | K5 |
|                        | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| <b>Core practical</b>  | 1  | Isolation, Analysation and measuring of microbes  | K5 |
|                        | 2  | Acquire and analyze interrelationships between algae, fungi and Lichen  | K4 |
|                        | 3  | Gain the knowledge about morphology and anatomy organizations of Bryophytes, Pteridophytes, Gynmosperms and Fossils   | K2 |
|                        | 4  | To encourage the young minds to conserve the environment  | K6 |
|                        | 5  | Expertise to create biodiversity map in India   | K3 |
|                        | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> – Create |   |    |
| <b>PHYTO PATHOLOGY</b> | 1  | Recognize the host and pathogen interaction   | K1 |
|                        | 2  | Expertise through control of food and commercial crop pathogens   | K2 |
|                        | 3  | Improve to handling disease free varieties.   | K3 |
|                        | 4  | Implement the disease management techniques in the fields.  | K4 |
|                        | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |    |
| <b>Core Paper V</b>    | 1  | The course will facilitate the adequate knowledge about the cell biology and basic concept of genetics, structure of organisms and advanced molecular techniques. | K1 |
|                        | 2  | To understand the structure and function of basic components of prokaryotic and eukaryotic cells, especially its membrane organization and organelles             | K2 |
|                        | 3  | To introduce to rapid contemporary changes witnessed in plant   | K3 |

|                        |   |   |    |
|------------------------|---|---|----|
|                        |   | molecular biology.  |    |
|                        | 4   | Basic organization of genetic material and the realms of events associated with replication and gene expression will be examined  | K4 |
|                        | 5   | The subject provides knowledge about different techniques of biology and Gene.  | K5 |
|                        | 6   | Students will gain knowledge about the basic and fundamental organization of life and genetic material and their applications.  | K6 |
|                        | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>Core Paper VI</b>   | 1   | Students will demonstrate an understanding of Mendelian and molecular genetics, cell structure, cell physiology, and molecular processes of cells. Understanding of the principles of evolution.  | K1 |
|                        | 2   | To understand the role of genetic technologies in industries related to biotechnology, pharmaceuticals, energy, and other fields. Understanding the role of genetic mechanisms in evolution. Understanding the different methods of plant breeding for the improvement of crop                              | K2 |
|                        | 3   | The ability to recognize the experimental rationale of genetic studies as they are described in peer-reviewed research articles and grant proposals to federal and other funding agencies.  | K3 |
|                        | 4   | Students will demonstrate the ability to work effectively with molecular, computational, mathematical, and statistical approaches to acquire, analyze, and model experimental datasets. The ability to evaluate conclusions that are based on genetic data.   | K4 |
|                        | 5   | Communication skills required in the discipline including oral presentations of research data, published research articles, grant proposals, and poster presentations at conferences  | K5 |
|                        | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>Core Paper VII</b>  | 1   | Understand the intricacies involved in the reproduction of plants.  | K1 |
|                        | 2   | Gain awareness about the various process of compatibility involved in plant reproduction  | K2 |
|                        | 3   | To explain the importance of secondary growth and to state the location of tissues involved in secondary growth in dicot and monocot plants   | K3 |
|                        | 4   | To state the types of growth and to compare their structure and functions and processes of floral development.  | K4 |
|                        | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>Core Paper VIII</b> | 1   | The lecture time is used to introduce key concepts of cell biology as they relate to manipulating cells in culture, to demonstrate the specific skills used by tissue culture technicians, and to provide the student with information on the applications of tissue culture in modern laboratory settings. | K1 |
|                        | 2   | Students will simultaneously begin basic plant micropropagation in tissue culture, with attention to differences in culture requirements for  | K2 |



|                       |  |  |    |
|-----------------------|--|--|----|
|                       |  | different plants   |    |
|                       | 3  | Apply the technique of micropropagation such as somatic embryogenesis, organogenesis and protoplast culture for ex situ conservation and mass multiplication of endangered and economically important plants | K3 |
|                       | 4  | Analyze and relate morphological, physiological and somaclonal variations for crop improvement   | K4 |
|                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| <b>PRACTICAL - II</b> | 1  | Find out the cell organelles and various stages of the nucleus   | K1 |
|                       | 2  | Apply the basic principles of genetics and plant breeding for genetic improvement of plants.   | K4 |
|                       | 3  | Understand the primary and secondary structure of plants.  | K2 |
|                       | 4  | Acquire and analyze the plant tissue culture techniques  | K3 |
|                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| Elective Paper II     | 1  | Imparting quality education.   | K1 |
|                       | 2  | Understanding the principles, theoretical aspects and developing skills in biotechnology of horticultural crops.   | K2 |
|                       | 3  | Development of technical manpower to cater the need of government, corporate, quasi government and research organizations both in India and abroad in horticulture.  | K3 |
|                       | 4  | To update knowledge on the recent research trends in the field of breeding of fruit crops with special emphasis on tropical, subtropical and temperate crops grown in India.                                 | K4 |
|                       | 5  | To update knowledge on the recent research trends in the field of biotic and abiotic stress management in horticultural crops.   | K4 |
|                       | 6  | The subject provides knowledge about different techniques of biology and Gene level.   | K5 |
|                       | 7  | Vital step to sustain the Golden Revolution in India.  | K6 |
|                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |

### MASTER OF SCIENCE - BOTANY

| S.NO              | COURSE | COURSE OUTCOME |
|-------------------|--------|----------------|
| <b>SEMESTER I</b> |        |                |

|    |  |   |   |    |
|----|--|---|---|----|
| 1. | <b>Core Paper I<br/>Microbiology</b>   | On the successful completion of the course, student will be able to:                        |   |    |
|    |  | 1   | Understanding of research ethics involving microorganisms to contribute to application, advancement and impartment of knowledge in the field of microbiology and molecular biology globally. The laboratory training will empower them to prepare for careers in broad range fields.  | K1 |
|    |  | 2   | Knowledge of the leading edge in a chosen specialized area of Microbiology, based on own research experience from a master's project and international literature. Can compete in national level competitive exams such as NET-JRF or GATE or International exams such as GRE-TOEFEL and can pursue career in higher studies. | K2 |
|    |  | 3   | Develop ability to independently carry out a complete scientific work process, including the understanding of theoretical background, hypothesis generation, collection and analysis of data, and interpretation and presentation of results  | K3 |
|    |  | 4   | Is able to evaluate and apply relevant theory, methods and analytic approaches within the specialized field of microbiology, including statistical methods.   | K4 |
|    |  | 5   | Has high competence and multidisciplinary project experience within selected topics related to microbiology and ability to contribute in a multidisciplinary team.  | K5 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 2. | <b>Core Paper II<br/>Phycology,<br/>mycology and<br/>lichenology</b>                             | On the successful completion of the course, student will be able to                         |   |    |
|    |  | 1   | Grasp the basic concepts of lower life forms  | K1 |
|    |  | 2   | Understand the diversity in habits, habitats and organization of various groups of lower plants   | K2 |
|    |  | 3   | Inherit knowledge on the exploitation of useful products from lower forms for the betterment of human welfare   | K3 |
|    |  | 4   | Apply their acquired knowledge to improve the economic quality of the lower life forms.   | K4 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 3. | <b>Core Paper III<br/>Bryophytes,<br/>pteridophytes,<br/>gymnosperms<br/>and<br/>paleobotany</b> | On the successful completion of the course, student will be able to:                        |   |    |
|    |  | 1   | Grasp the knowledge on phylogeny of Bryophytes, Pteridophytes and Gymnosperms.  | K1 |
|    |  | 2   | Assume the alternation of generations of Vascular Cryptogams and Phanerogams..  | K2 |
|    |  | 3   | Apply the knowledge on identification of living fossils from the fossils and the role of fossils in oil exploration and coal excavation.  | K3 |
|    |  | 4   | Discriminate various kinds of fossilization process and Radio carbon dating.  | K4 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 4. | <b>Core Paper IV<br/>environmental<br/>botany and<br/>conservation<br/>biology</b>               | On the successful completion of the course, student will be able to:                        |   |    |
|    |  | 1   | Comprise the concepts of ecosystem, biogeochemical cycle and species selection  | K1 |
|    |  | 2   | Realize the environmental deterioration and possible measures for their revival   | K2 |

|                    |   |  |   |    |
|--------------------|---|--|---|----|
|                    |   | 3  | Appeal their acquired knowledge to conserve the species and natural resources. in modern techniques.  | K3 |
|                    |   | 4  | Monitor and register the biodiversity changes through remote sensing  | K4 |
|                    |   | 5  | Apply strategies for the conservation of Germplasm  | K5 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |    |
| 5.                 | <b>Elective I<br/>Phytopathology</b>                                    | On the successful completion of the course, student will be able to:   |   |    |
|                    |   | 1  | Recognize the host and pathogen interaction   | K1 |
|                    |   | 2  | Expertise through control of food and commercial crop pathogens   | K2 |
|                    |   | 3  | Improve to handling disease free varieties.   | K3 |
|                    |   | 4  | Implement the disease management techniques in the fields.  | K4 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |    |
| <b>SEMESTER II</b> |   |  |   |    |
|                    | <b>Core Paper V<br/>6 Cell and<br/>molecular biology</b>                | On the successful completion of the course, student will be able to:   |   |    |
|                    |   | 1  | The course will facilitate the adequate knowledge about the cell biology and basic concept of genetics, structure of organisms and advanced molecular techniques.   | K1 |
|                    |   | 2  | To understand the structure and function of basic components of prokaryotic and eukaryotic cells, especially its membrane organization and organelles   | K2 |
|                    |   | 3  | To introduce to rapid contemporary changes witnessed in plant molecular biology.  | K3 |
|                    |   | 4  | Basic organization of genetic material and the realms of events associated with replication and gene expression will be examined  | K4 |
|                    |   | 5  | The subject provides knowledge about different techniques of biology and Gene.  | K5 |
|                    |   | 6  | Students will gain knowledge about the basic and fundamental organization of life and genetic material and their applications.  | K6 |
|                    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |    |
| 7                  | <b>Core Paper VI<br/>Genetics,<br/>evolution and<br/>plant breeding</b> | On the successful completion of the course, student will be able to:   |   |    |
|                    |   | 1  | Students will demonstrate an understanding of Mendelian and molecular genetics, cell structure, cell physiology, and molecular processes of cells. Understanding of the principles of evolution.  | K1 |
|                    |   | 2  | To understanding the role of genetic technologies in industries related to biotechnology, pharmaceuticals, energy, and other fields. Understanding the role of genetic mechanisms in evolution. Understanding the different methods of plant breeding for the improvement of crop | K2 |

|    |   |   |   |    |
|----|---|---|---|----|
|    |   | 3   | The ability to recognize the experimental rationale of genetic studies as they are described in peer-reviewed research articles and grant proposals to federal and other funding agencies.  | K3 |
|    |   | 4   | Students will demonstrate the ability to work effectively with computational, mathematical, and statistical approaches to acquire, analyze, and model experimental datasets. The ability to evaluate conclusions that are based on genetic data.  | K4 |
|    |   | 5   | Communication skills required in the discipline including oral presentations of research data, published research articles, grant proposals, and poster presentations at conferences  | K5 |
|    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 8  | <b>Core Paper VII<br/>Anatomy,<br/>embryology and<br/>morphogenesis</b> | On the successful completion of the course, student will be able to:                        |   |    |
|    |   | 1   | Understand the intricacies involved in the reproduction of plants.  | K1 |
|    |   | 2   | Gain awareness about the various process of compatibility involved in plant reproduction  | K2 |
|    |   | 3   | To explain the importance of secondary growth and to state the location of tissues involved in secondary growth in dicot and monocot plants   | K3 |
|    |   | 4   | To state the types of growth and to compare their structure and functions and processes of floristic growth   | K4 |
|    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 9  | <b>Core Paper VIII<br/>Plant tissue<br/>culture</b>                     | On the successful completion of the course, student will be able to:                        |   |    |
|    |   | 1   | The lecture time is used to introduce key concepts of cell biology as they relate to manipulating cells in culture, to demonstrate the specific skills used by tissue culture technicians, and to provide the student with information on the applications of tissue culture in modern laboratory settings. | K1 |
|    |   | 2   | Students will simultaneously begin basic plant micropropagation in tissue culture, with attention to differences in culture requirements for different plants   | K2 |
|    |   | 3   | Apply the technique of micropropagation such as somatic embryogenesis, organogenesis and protoplast culture for ex situ conservation and mass multiplication of endangered and economically important plants  | K3 |
|    |   | 4   | Analyze and relate morphological, physiological and somaclonal variations for crop improvement  | K4 |
|    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 10 | <b>Elective Paper II<br/>Horticulture</b>                               | On the successful completion of the course, student will be able to:                        |   |    |
|    |   | 1   | Imparting quality education.  | K1 |
|    |   | 2   | Understanding the principles, theoretical aspects and developing skills in biotechnology of horticultural crops.  | K2 |

|                     |   |  |  |    |
|---------------------|---|--|--|----|
|                     |   | 3  | Development of technical manpower to cater the need of government, corporate, quasi government and research organizations both in India and abroad in horticulture.          | K3 |
|                     |   | 4  | To update knowledge on the recent research trends in the field of breeding of fruit crops with special emphasis on tropical, subtropical and temperate crops grown in India. | K4 |
|                     |   | 5  | To update knowledge on the recent research trends in the field of biotic and abiotic stress management in horticultural crops.   | K4 |
|                     |   | 6  | The subject provides knowledge about different techniques of biology and Gene level.   | K5 |
|                     |   | 7  | Vital step to sustain the Golden Revolution in India.  | K6 |
|                     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| <b>SEMESTER III</b> |   |  |  |    |
| 11                  | <b>Core Paper IX<br/>Plant taxonomy</b>   | On the successful completion of the course, student will be able to:   |  |    |
|                     |   | 1  | Classify Plant taxonomy and recognize the importance of herbarium  | K1 |
|                     |   | 2  | Evaluate the Important herbaria and botanical gardens  | K2 |
|                     |   | 3  | Interpret the rules of ICN in botanical nomenclature   | K3 |
|                     |   | 4  | Assess terms and concepts related to Phylogenetic Systematics  | K4 |
|                     |   | 5  | Generalize the characters of the families according to Bentham & Hooker's system of classification   | K5 |
|                     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 12                  | <b>Core Paper X<br/>Medicinal botany</b>  | On the successful completion of the course, student will be able to:   |  |    |
|                     |   | 1  | On the successful completion of this course students will able to know recent trends in plant science and its applications.  | K1 |
|                     |   | 2  | Be able to navigate the current healthcare environment, empower clients to make informed choices and refer when appropriate.   | K2 |
|                     |   | 3  | To know the marketing level and self-help entrepreneurship.  | K3 |
|                     |   | 4  | This supportive course is exposure knowledge about important chemicals of medicinal plants and their significant role in drug discovery.                                     | K4 |
|                     |   | 5  | Gain knowledge about nutritive diet for different age groups.  | K5 |
|                     |   | 6  | Acquire knowledge about healthy food for normal person and patient.  | K6 |
|                     |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |
| 13                  | <b>Core Paper XI<br/>Plant physiology</b> | On the successful completion of the course, student will be able to:   |  |    |
|                     |   | 1  | Recognize the plant, water and mineral interaction   | K1 |
|                     |   | 2  | Understand the remarkable metabolic pathway in plants.   | K2 |
|                     |   | 3  | Improve to phytohormones in plants.  | K3 |
|                     |   | 4  | Estimate the stress resistance mechanism for the better yield of the crops.  | K4 |

|                    |  |   |   |    |
|--------------------|--|---|---|----|
|                    |  | 5   | Implement the seed dormancy in the fields.  | K5 |
|                    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 14                 | <b>Core Paper XII<br/>Phytochemistry</b>                             | <b>On the successful completion of the course, student will be able to:</b>                 |   |    |
|                    |  | 1   | Explain basic metabolic pathways of plants and formation of different secondary metabolites through various biosynthetic pathways in plants                                       | K1 |
|                    |  | 2   | Utilization of radioactive isotopes in the investigation of biosynthetic pathways   | K2 |
|                    |  | 3   | Acquire knowledge on properties and nature of macromolecules  | K3 |
|                    |  | 4   | Apply current biochemical techniques to plan and carry out their experiments.   | K4 |
|                    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| 15                 | <b>Elective III<br/>Bioinstrumentation and biological techniques</b> | <b>On the successful completion of the course, student will be able to:</b>                 |   |    |
|                    |  | 1   | To apply the concepts of bioanalytical techniques in biotechnology research   | K1 |
|                    |  | 2   | To handle these bioanalytical techniques in industry  | K2 |
|                    |  | 3   | To operate and optimize the experimental conditions of different analytic techniques  | K3 |
|                    |  | 4   | To implement knowledge for the separation of bioentities.   | K4 |
|                    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |
| <b>SEMESTER IV</b> |  |   |   |    |
| 16                 | <b>Core Paper XIII<br/>Biotechnology and genetic engineering</b>     | <b>On the successful completion of the course, student will be able to:</b>                 |   |    |
|                    |  | 1   | To apply the basic concepts of cell and molecular biology in modern biology   | K1 |
|                    |  | 2   | To correlate between genotypic and phenotypic attributes of an organism   | K2 |
|                    |  | 3   | To perform genetic manipulations using types of cloning and expression vectors  | K3 |
|                    |  | 4   | To explain how genetic engineering involves the use of recombinant DNA technology for crop improvement and to identify the molecular markers for selection of superior genotypes. | K4 |
|                    |  | 5   | To acquire fundamental knowledge on the application of various molecular tools and techniques for improvement of microbes and higher plants                                       | K5 |
|                    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |    |

|    |   |  |  |    |
|----|---|--|--|----|
| 17 | <b>Elective IV<br/>Bioinformatics<br/>and Biostatistics</b> | <b>On the successful completion of the course, student will be able to:</b>  |  |    |
|    |   | 1  | Acquire the knowledge of biological databases  | K1 |
|    |   | 2  | Recognise the biomolecule structure and functions  | K2 |
|    |   | 3  | Assess the knowledge of biological tools to manipulate unknown biomolecules to known.                  | K3 |
|    |   | 4  | Execute appropriate algorithms to identify the similarities and dissimilarities in biological samples. | K4 |
|    |   | 5  | Practice with idea generation techniques, Learn how to manage the creative process                     | K5 |
|    |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |    |

**PG AND RESEARCH DEPARTMENT OF COMMERCE**  
**B.COM**

| <b>Program Specific Outcomes (PSOs)</b>  |   |
|--|---|
| After the successful completion of B.COM program, the students are expected to |   |
| PSO1   | To provide strong base on the course relevant to the area of commerce which helps to choose their career  |
| PSO2   | To enhance knowledge and skills among students which built confidence to identify their career opportunities in multiple dimensions.  |
| PSO3   | Nurture the students in intellectual, personal, interpersonal and social skills with a focus on relevant professional career particularly, to maximize professional growth. |
| PSO4   | Empower the students with necessary competencies and decision-making skills to foster the innovative thinking to become an entrepreneur                                     |
| PSO5   | Strengthen the students to become expert in the field of communication with ethical consciousness.  |
| PSO6   | To know the use of basic mathematical and statistical knowledge necessary for analysis of various problems in the field of finance, auditing, taxation and costing.         |

| <b>Program Outcomes (POs)</b>                 |  |
|---|--|
| On successful completion of the B.COM program |  |
| PO1   | Build the wide range of knowledge in the areas of accounting concepts and their application to meet the current requirements of the industry.  |
| PO2   | Develop strong knowledge in the areas such as finance, economics, taxation, laws relating to commerce and auditing helps to build the conceptual and analytical skills in the field of commerce. |
| PO3   | Inculcate the students to nurture their skills in personal, interpersonal, intellectual and others skills to develop their professional career and growth.                                       |
| PO4   | Motivate the students to develop decision making and problem-solving skills with the required knowledge in business to avail better business opportunities.                                      |
| PO5   | To develop business ethics and social responsibilities with commercial and social skills.  |





**PG AND RESEARCH DEPARTMENT OF COMMERCE**

**COURSE OUTCOME**

**BACHELOR OF COMMERCE**

| S.NO              | COURSE   | COURSE OUTCOME   |   |    |
|-------------------|--|--|---|----|
| <b>Semester I</b> |  |  |   |    |
| 1.                | Core I –<br>Principles of<br>Accountancy                       | On the successful completion of the course, student will be able to:               |   |    |
|                   |  | 1  | Recalling Accounting Concepts and Conventions and use Accounting rules to record business transactions in the form of Journal, Ledger, subsidiary books and preparation of Trial Balance. | K1 |
|                   |  | 2  | Understanding the steps involved in locating errors   | K2 |
|                   |  | 3  | Understanding and the preparation of final accounts for sole traders.   |    |
|                   |  | 4  | Outline the concepts of Bills of exchange, Average due date and Account Current   | K2 |
|                   |  | 5  | Examine the concepts of consignment and joint venture.  | K4 |
|                   |  | 6  | Analyze the bank reconciliation statement, Receipts and payments, Income and expenditure and Balance sheet and accounting for professionals to enhance the knowledge.                     | K4 |
|                   |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| 2.                | Core II–<br>Business<br>Organization &<br>Office<br>Management | On the successful completion of the course, student will be able to:               |   |    |
|                   |  | 1  | Understanding the concepts of business and its forms of organizations involved in sole trader, partnership firms, companies and co-operative societies and public enterprise.             | K2 |
|                   |  | 2  | Analyzing the business factors which are involved in sources of finance.  | K4 |
|                   |  | 3  | Explaining the functioning of stock exchanges SEBI, DEMAT of shares.  | K2 |
|                   |  | 4  | Remembering office functions, layout and accommodation.   | K1 |
|                   |  | 5  | Outlining office equipments and EDP.  | K2 |
|                   |  | 6  | Understanding the concepts and technologies involved in Industry 4.0  |    |
|                   |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |

|                    |   |  |  |    |
|--------------------|---|--|--|----|
| 3.                 | Allied Paper I –<br>Agricultural Economy of India | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Understand the Agricultural Economy of the India and measure the development of agriculture in India | K2 |
|                    |   | 2  | Identify the problems and prospects of Indian agriculture and importance of green revolution.        | K2 |
|                    |   | 3  | Study the agricultural marketing, pricing and their effect marketing system                          | K2 |
|                    |   | 4  | Outline the land tenure and land ceiling system in India   | K1 |
|                    |   | 5  | Understand the role of agricultural banks for rural economic development                             | K2 |
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>Semester II</b> |   |  |  |    |
| 4.                 | Core III –<br>Higher Financial Accounting         | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Describing the concepts based on depreciation and its methods in books of accounts.                  | K1 |
|                    |   | 2  | Outline about the nature of Investment and Royal excluding Sublease.                                 | K2 |
|                    |   | 3  | Identifying the essential characteristics of single entry system.                                    | K3 |
|                    |   | 4  | Applying the basic concepts of departmental and branch accounting.                                   | K4 |
|                    |   | 5  | Familiarize the procedure relating to hire purchase and installment in books of accounts             | K2 |
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 5.                 | Core IV –<br>Principles of Marketing              | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Defining the various concepts and terms related to marketing   | K1 |
|                    |   | 2  | Explaining about various marketing functions   | K2 |
|                    |   | 3  | Understanding terms of consumer behavior and examined about different concepts related to consumers. | K2 |
|                    |   | 4  | Identifying the marketing mix and its elements   | K1 |

|                     |                                     |  |  |    |
|---------------------|-------------------------------------|--|--|----|
|                     |                                     | 5  | Understanding different provisions related to trends in emerging markets.                    | K2 |
|                     |                                     | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 6.                  | Allied Paper II – Economic Analysis | On the successful completion of the course, student will be able to:               |  |    |
|                     |                                     | 1  | Understand The Fundamentals of Micro Economic And Theory Consumer Behaviour                  | K2 |
|                     |                                     | 2  | Learn the concepts of demand and elasticities of demand                                      | K2 |
|                     |                                     | 3  | Understand theories of production, cost and revenue concepts                                 | K2 |
|                     |                                     | 4  | Analyse the price and output determination under various market structures                   | K4 |
|                     |                                     | 5  | Acquire knowledge on theories of productivity and wages                                      | K2 |
|                     |                                     | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>Semester III</b> |                                     |  |  |    |
| 7.                  | Core V-Higher Financial Accounting  | On the successful completion of the course, student will be able to:               |  |    |
|                     |                                     | 1  | Understanding the basic concepts of partner and procedures related to calculation of ratios. | K2 |
|                     |                                     | 2  | Acquiring the principle at the time of retirement in the books of partner                    | K1 |
|                     |                                     | 3  | Analyzing dissolution and insolvency of firms and individuals.                               | K4 |
|                     |                                     | 4  | Evaluate the insolvency or loss of individuals or firms.                                     | K5 |
|                     |                                     | 5  | Examine the concepts based on voyage, Human resource and inflation accounting.               | K4 |
|                     |                                     | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 8.                  | Core VI – Commercial Law            | On the successful completion of the course, student will be able to:               |  |    |
|                     |                                     | 1  | Assessing the various elements related business law and contract                             | K5 |
|                     |                                     | 2  | Interpreting different type of contract and its features                                     | K2 |
|                     |                                     | 3  | Explain about the agency system related to creation and termination of agency                | K5 |
|                     |                                     | 4  | Compare between rights and duties of indemnity, guarantee                                    | K5 |
|                     |                                     | 5  | Examine the distinct between sale and agreement to sell and its features                     | K4 |
|                     |                                     | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 9.                  | Core VII – Principles of            | On the successful completion of the course, student will be able to:               |  |    |
|                     |                                     | 1  | Explaining the concepts based on management and its features                                 | K2 |

|                    |  |  |   |    |
|--------------------|--|--|---|----|
|                    | Management   | 2  | Summarizing the principles and importance of planning   | K2 |
|                    |  | 3  | Interpreting various concepts based on organization and its element   | K2 |
|                    |  | 4  | Examining the determinants of behaviour and motivation theories   | K4 |
|                    |  | 5  | Understanding the need and techniques of communication in management  | K2 |
|                    |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| <b>10.</b>         | Allied :III - Mathematics for Business                   | On the successful completion of the course, student will be able to:               |   |    |
|                    |  | 1  | Understand the basic concepts of arithmetic and geometric series and different effective rates of interest for sinking fund, annuity and present value. | K2 |
|                    |  | 2  | Recall the basic concepts of addition and multiplication analysis and input and output analysis.  | K1 |
|                    |  | 3  | Explain of variables, constants and functions and evaluate the first and second order derivatives.  | K2 |
|                    |  | 4  | Interpret integral calculus and determining definite and indefinite functions.  | K2 |
|                    |  | 5  | Analyze the linear programming problem by using graphical solution and simple method.   | K4 |
|                    |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| <b>11.</b>         | Skill based Subject -1 : Business Application Software-I | On the successful completion of the course, student will be able to:               |   |    |
|                    |  | 1  | To know the basics on MS Word   | K2 |
|                    |  | 2  | To study formatting features in MS Word   | K2 |
|                    |  | 3  | To understand the concept of mail merge   | K2 |
|                    |  | 4  | To gain knowledge on excel operations   | K2 |
|                    |  | 5  | To acquire knowledge on Managing and Analyzing Complex Worksheet  | K2 |
|                    |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| <b>Semester IV</b> |  |  |   |    |

|  |  |  |  |    |
|--|--|--|--|----|
| <b>12.</b>   | Core VIII–<br>Corporate<br>Accounting I                | On the successful completion of the course, student will be able to:               |  |    |
|  |  | 1  | Explaining about the basic provisions towards issue of shares in market  | K2 |
|  |  | 2  | Understanding the concepts of debenture and its accounting   | K2 |
|  |  | 3  | Analyze the companies final accounts and Managerial Remuneration   | K4 |
|  |  | 4  | Estimating methods of goodwill and shares  | K5 |
|  |  | 5  | Examine various procedures related to liquidation of companies   | K4 |
|  |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>13.</b>   | Core IX –<br>Computer<br>Applications in<br>Business   | On the successful completion of the course, student will be able to:               |  |    |
|  |  | 1  | Recall the various concepts relating to computer and its various parts   | K1 |
|  |  | 2  | Understand the meaning of software’s, operating system etc   | K2 |
|  |  | 3  | Understanding the meaning and utility of database management system  | K2 |
|  |  | 4  | Evaluate the various aspects of management information system  | K5 |
|  |  | 5  | Generating more ideas regarding the use of internet for business purpose   | K6 |
|  |  | 6  | Understanding the concepts of data handling and applying the knowledge in the field of business.                                 | K2 |
| K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |  |  |    |
| <b>14.</b>   | Core X –<br>Company Law<br>and Secretarial<br>Practice | On the successful completion of the course, student will be able to:               |  |    |
|  |  | 1  | To Define the fundamentals of corporate law and the amendments.  | K1 |
|  |  | 2  | Identify the role, responsibilities, appointment and liabilities of corporate directors  | K2 |
|  |  | 3  | Analyzing various winding up procedures, regulations and formalities under law   | K4 |
|  |  | 4  | Examine the role of corporate secretary ship and specific conditions   | K4 |
|  |  | 5  | Outline corporate level meetings with regard to duties of company secretary, drafting correspondence, Notice, Agenda and Minutes | K2 |
| K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |  |  |    |
| <b>15.</b>   | Core XI –<br>Executive<br>Business<br>Communication    | On the successful completion of the course, student will be able to:               |  |    |
|  |  | 1  | Outline the importance of effective business communication   | K2 |
|  |  | 2  | Understand the intricacies of responding to business related queries   | K2 |
|  |  | 3  | Categorizing effective correspondence with banks, insurance and agencies   | K3 |

|  |   |  |   |    |
|--|---|--|---|----|
|  |   | 4  | Examine effective response to company secretarial correspondence  | K4 |
|  |   | 5  | Analyze new innovative and effective ideas for business communication   | K4 |
|  |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| 16.  | Core XII – Banking Theory   | On the successful completion of the course, student will be able to:               |   |    |
|  |   | 1  | Illustrate the classification of commercial banks, functions and credit creation                              | K2 |
|  |   | 2  | Outline the recent trade in banking   | K2 |
|  |   | 3  | Analyze the functions of central banks and its credit controlling measures                                    | K4 |
|  |   | 4  | Examine the concepts of Indian Money Market   | K4 |
|  |   | 5  | Explain the role of SBI Commercial banks and Development banks  | K5 |
|  |   | 6  | Understanding the recent technologies related to Fintech and applying the knowledge practically.              | K2 |
|  |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| 17.  | Allied :IV: Statistics For Business   | On the successful completion of the course, student will be able to:               |   |    |
|  |   | 1  | Understand the basic concepts of arithmetic and geometric mean and different types of data collection.        | K2 |
|  |   | 2  | Recall measures of dispersion.  | K1 |
|  |   | 3  | Execute correlation and regression analysis.  | K3 |
|  |   | 4  | Understand the different types of moving averages.  | K2 |
|  |   | 5  | Analyze interpolation and probability   | K4 |
| K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |  |   |    |
| 18.  | Skill based Subject 2: Computer Applications (MS-Word and MS-Excel)- Practical –I | On the successful completion of the course, student will be able to:               |   |    |
|  |   | 1  | Remember the basic concepts computer applications using MS-Office applications for the business transactions. | K2 |
|  |   | 2  | Create customers list using mail merge for sending letters to the respondents at a time.                      | K6 |
|  |   | 3  | Generate the database using MS-Word and excel.  | K3 |
|  |   | 4  | Execute and apply various statistical tools available in MS excel for the business enterprise transactions.   | K4 |
|  |   | 5  | Apply various statistical tools available in MS-excel for the business enterprise transactions                | K4 |
| K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |  |   |    |

**Semester V**

|            |  |  |  |    |
|------------|--|--|--|----|
| <b>19.</b> | Core XIII –<br>Corporate<br>Accounting II      | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Recall various concepts and methods of preparing accounts under mergers and acquisitions                 | K1 |
|            |  | 2  | Understand various methods of preparing holding company accounts   | K2 |
|            |  | 3  | Understand various methods of preparing and assessing final accounts of banking companies                | K2 |
|            |  | 4  | Analyze the final accounts of insurance companies  | K4 |
|            |  | 5  | Analyze the accounting statements of electricity companies   | K4 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>20.</b> | Core XIV–<br>Banking Law<br>and Practices      | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Remembering the various terms and concepts used in banking industry                                      | K1 |
|            |  | 2  | Understanding the various process and activities of accounts in banks                                    | K2 |
|            |  | 3  | Outline various features of cheques for easy and simple banking  | K2 |
|            |  | 4  | Examine the various loans and advance related process in banks   | K4 |
|            |  | 5  | Classifying various kind of documents involved in banking services                                       | K2 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>21.</b> | Core XV–<br>Cost<br>Accounting                 | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Recall various concepts of costing and costing methods   | K1 |
|            |  | 2  | Analyze the various elements of costing  | K4 |
|            |  | 3  | Explain the labour wage payment system   | K2 |
|            |  | 4  | Outline the cost under process costing system  | K2 |
|            |  | 5  | Examine about operational costing, contract costing and Reconciliation of Cost and Financial Statements. | K4 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>22.</b> | Core XVI–<br>Income Tax<br>Law and<br>Practice | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Outline the various terminologies related to income tax  | K1 |
|            |  | 2  | Understand the method of calculating and levying tax   | K2 |
|            |  | 3  | Apply the various tax laws and available provisions in tax computations                                  | K3 |
|            |  | 4  | Evaluate the set off and carry forward of losses while calculating personal income                       | K5 |
|            |  | 5  | Analyze self-assessment of income and tax computation  | K4 |



|                    |   |  |  |    |
|--------------------|---|--|--|----|
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 23.                | Elective –I:<br>Business Finance                              | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Outline various concepts relating to finance   | K2 |
|                    |   | 2  | List the various techniques of financial planning  | K2 |
|                    |   | 3  | Analyze various sources and forms of finance   | K4 |
|                    |   | 4  | Examine the various dimensions of capital market and their components                        | K4 |
|                    |   | 5  | List the capitalization concept and related theories for decision making                     | K4 |
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 24.                | Skill based<br>Subject-3:<br>Business Application Software II | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Understand the basic concepts computer applications using MS-PowerPoint                      | K2 |
|                    |   | 2  | Create and do effective presentation for the business meeting using PowerPoint presentation. | K2 |
|                    |   | 3  | Understand the basic concepts computer applications using MS-Access                          | K2 |
|                    |   | 4  | Generate the database using MS-Access  | K2 |
|                    |   | 5  | Examine the Filtering and Querying Tables  | K2 |
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>Semester VI</b> |   |  |  |    |
| 25.                | Core XVII –<br>Management Accounting                          | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Outline the various concepts relating to management accounting                               | K2 |
|                    |   | 2  | Analyze financial statements using ratio analysis  | K4 |
|                    |   | 3  | Evaluate the working capital management of companies   | K5 |
|                    |   | 4  | Comparing various alternatives using marginal costing and decision making                    | K2 |
|                    |   | 5  | Analyze new budget and budgetary control for organizations                                   | K4 |
|                    |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| 26.                | Core XVIII -<br>Principles of Auditing                        | On the successful completion of the course, student will be able to:               |  |    |
|                    |   | 1  | Define the important concept and rules relating to auditing                                  | K1 |
|                    |   | 2  | Outline the techniques and applicability of internal audit                                   | K2 |
|                    |   | 3  | Analyze the valuation of assets and liabilities in business                                  | K4 |

|            |  |  |  |    |
|------------|--|--|--|----|
|            |  | 4  | Analyze the accounts and auditing the joint stock companies                  | K4 |
|            |  | 5  | Examine about investigation and auditing of computerized accounts            | K4 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>27.</b> | Core XIX-<br>Indirect<br>Taxes   | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Recall various concepts relating to Indirect tax regime in India             | K1 |
|            |  | 2  | Analyze the concept and applicability of GST in businesses                   | K4 |
|            |  | 3  | Compare the GST regime with other indirect tax laws prior to it              | K2 |
|            |  | 4  | Illustrate GST system in own business and other prototypes                   | K2 |
|            |  | 5  | Examine the custom law and related duties and taxes                          | K4 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>28.</b> | Elective–II:<br>Entrepreneurial<br>development   | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Recall the importance and role of entrepreneurship as an economic activity   | K1 |
|            |  | 2  | Explain the various process of setting up a startup                          | K2 |
|            |  | 3  | Outline the various institutional services to entrepreneur                   | K2 |
|            |  | 4  | Analyze the various financial institution available to support entrepreneurs | K4 |
|            |  | 5  | List the various subsidies and incentives available for entrepreneurs        | K4 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>29.</b> | Elective–III:<br>Financial<br>markets  | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Define the basic concepts of financial market                                | K1 |
|            |  | 2  | Understand the components of corporate securities market                     | K2 |
|            |  | 3  | Analyze the functions and working Mechanism of stock exchanges in India      | K4 |
|            |  | 4  | Explain the role of banks and intermediaries in financial market             | K4 |
|            |  | 5  | Apply various trends and new modes in financing                              | K3 |
|            |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |    |
| <b>30.</b> | Skill based<br>Subject-4:<br>Computer<br>Applications:<br>MS- Power<br>Point, MS<br>Access and | On the successful completion of the course, student will be able to:               |  |    |
|            |  | 1  | Prepare a PowerPoint presentation with animation and multimedia effects      |    |
|            |  | 2  | To create a database and to perform basic operations with data               |    |
|            |  | 3  | To create a company profile and making alterations when required             |    |

|  |                             |  |   |  |
|--|-----------------------------|--|---|--|
|  | Tally 9.2 –<br>Practical II |  |   |  |
|  |                             | 4  | To prepare vouchers, ledgers and trial balance. |  |
|  |                             | 5  |   |  |
|  |                             | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |  |

**PG AND RESEARCH DEPARTMENT OF COMMERCE**  
**M.COM (CA)**

| <b>Program Specific Outcomes (PSOs)</b>   |   |
|---|---|
| After the successful completion of the M. Com (Computer Applications) program, the students are expected to |   |
| PSO1  | To gain practical insights in project preparation and analysis of business data             |
| PSO2  | Uses of software tools to carry out a specified financial analysis for a corporate sector   |
| PSO3  | Apply the knowledge gained during the course of the program to solve the real time problems |
| PSO4  | To Meet the needs of industry4.0  |
| PSO5  | Communicate effectively with ICT professionals  |

| <b>Program Outcomes (POs)</b>  |   |
|--|---|
| On successful completion of the M. Com (Computer Applications) program |   |
| PO1  | To be conversant with recent development in commerce and trust areas in the field of computer             |
| PO2  | To gain Computer knowledge and make use of it effectively in the field of commerce                        |
| PO3  | To design computer software to suit the needs of industry and business                                    |
| PO4  | To acquire skill in doing business in the electronic environment  |
| PO5  | To become worthy citizens of the nation by enriching knowledge in the application of computer in commerce |



**PG AND RESEARCH DEPARTMENT OF COMMERCE**

**COURSE OUTCOME**

**M.COM (C.A)**

| <b>S.<br/>N<br/>O</b>   | <b>COURSE</b>   | <b>COURSE OUTCOME</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
|---|---|---|---|--|--|----------|--|-----------|----------|---|-----------|----------|---|-----------|----------|--|-----------|----------|---|-----------|--|--|--|
| <b>Semester I</b>   |   |   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>1.</b>   | <b>MANAGERIAL ECONOMICS</b>   | <table border="1"> <tr> <td colspan="3"><b>On The Successful completion of the course, student will be able to:</b></td> </tr> <tr> <td align="center"><b>1</b></td> <td><b>Acquire the knowledge about the nature and scope of managerial economics, demand analysis and law of variable proportion.</b></td> <td align="center"><b>K1</b></td> </tr> <tr> <td align="center"><b>2</b></td> <td><b>Understand the role of managerial economist, goal of corporate enterprises , demand determinants, types of market ,national income and public finance.</b></td> <td align="center"><b>K2</b></td> </tr> <tr> <td align="center"><b>3</b></td> <td><b>Have thorough knowledge about various types of costs and revenues and break even point analysis.</b></td> <td align="center"><b>K3</b></td> </tr> <tr> <td align="center"><b>4</b></td> <td><b>Analyze role of managerial economist in demand analysis , cost and production analysis.</b></td> <td align="center"><b>K4</b></td> </tr> <tr> <td align="center"><b>5</b></td> <td><b>Evaluate the value of enterprises, pricing and output decisions, business cycles and remedies of industrial sickness</b></td> <td align="center"><b>K5</b></td> </tr> <tr> <td colspan="3"><b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b></td> </tr> </table> | <b>On The Successful completion of the course, student will be able to:</b> |  |  | <b>1</b> | <b>Acquire the knowledge about the nature and scope of managerial economics, demand analysis and law of variable proportion.</b> | <b>K1</b> | <b>2</b> | <b>Understand the role of managerial economist, goal of corporate enterprises , demand determinants, types of market ,national income and public finance.</b> | <b>K2</b> | <b>3</b> | <b>Have thorough knowledge about various types of costs and revenues and break even point analysis.</b> | <b>K3</b> | <b>4</b> | <b>Analyze role of managerial economist in demand analysis , cost and production analysis.</b> | <b>K4</b> | <b>5</b> | <b>Evaluate the value of enterprises, pricing and output decisions, business cycles and remedies of industrial sickness</b> | <b>K5</b> | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b> |  |  |
| <b>On The Successful completion of the course, student will be able to:</b> |   |   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>1</b>  | <b>Acquire the knowledge about the nature and scope of managerial economics, demand analysis and law of variable proportion.</b>                              | <b>K1</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>2</b>  | <b>Understand the role of managerial economist, goal of corporate enterprises , demand determinants, types of market ,national income and public finance.</b> | <b>K2</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>3</b>  | <b>Have thorough knowledge about various types of costs and revenues and break even point analysis.</b>   | <b>K3</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>4</b>  | <b>Analyze role of managerial economist in demand analysis , cost and production analysis.</b>  | <b>K4</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>5</b>  | <b>Evaluate the value of enterprises, pricing and output decisions, business cycles and remedies of industrial sickness</b>                                   | <b>K5</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b>  |   |   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>2.</b>   | <b>MARKETING MANAGEMENT</b>   | <table border="1"> <tr> <td colspan="3"><b>On The Successful completion of the course, student will be able to</b></td> </tr> <tr> <td align="center"><b>1</b></td> <td><b>Recollect the marketing concepts, types and modern marketing Concept.</b></td> <td align="center"><b>K1</b></td> </tr> </table>  | <b>On The Successful completion of the course, student will be able to</b>  |  |  | <b>1</b> | <b>Recollect the marketing concepts, types and modern marketing Concept.</b>   | <b>K1</b> |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>On The Successful completion of the course, student will be able to</b>  |   |   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |
| <b>1</b>  | <b>Recollect the marketing concepts, types and modern marketing Concept.</b>  | <b>K1</b>   |   |  |  |          |  |           |          |   |           |          |   |           |          |  |           |          |   |           |  |  |  |

|           |   |   |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|-----------|---|---|--|--|----|---|---|----|---|---|----|---|---|----|---|--|----|---|--|----|
|           |   |   | 2  | Identify the macro and micro environments of a market and buyer Behavior.                | K2 |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|           |   |   | 3  | Locate the different types of products, product line, product mix and pricing decisions. | K3 |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|           |   |   | 4  | Evaluate the importance of channels of distribution and promotional mix.                 | K4 |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|           |   |   | 5  | Acquire the knowledge to market the agricultural produce and about marketing research.   | K4 |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|           |   |   | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b> |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
|           |   |   |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
| <b>3.</b> | <b>DATABASE MANAGEMENT SYSTEM</b>   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tbody> <tr> <td>1</td> <td>Describe the fundamental elements of relational database management systems</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Explain The Basic Concepts Of Relational Data Model, entity-relationship model, relational database design, relational algebra and SQL.</td> <td>K1</td> </tr> <tr> <td>3</td> <td>Convert TheEr-model to relational tables, populate relational database and formulate sql queries on data.</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Evaluate the hierarchical approach and program communication block</td> <td>K5</td> </tr> <tr> <td>5</td> <td>Be familiar with basic database knowledge in Network Approach, DBTG Data manipulation.</td> <td>K6</td> </tr> </tbody> </table> <p>K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create</p> |  |  |    | 1 | Describe the fundamental elements of relational database management systems | K2 | 2 | Explain The Basic Concepts Of Relational Data Model, entity-relationship model, relational database design, relational algebra and SQL. | K1 | 3 | Convert TheEr-model to relational tables, populate relational database and formulate sql queries on data. | K3 | 4 | Evaluate the hierarchical approach and program communication block | K5 | 5 | Be familiar with basic database knowledge in Network Approach, DBTG Data manipulation. | K6 |
| 1         | Describe the fundamental elements of relational database management systems   | K2  |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
| 2         | Explain The Basic Concepts Of Relational Data Model, entity-relationship model, relational database design, relational algebra and SQL. | K1  |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
| 3         | Convert TheEr-model to relational tables, populate relational database and formulate sql queries on data.                               | K3  |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
| 4         | Evaluate the hierarchical approach and program communication block  | K5  |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |
| 5         | Be familiar with basic database knowledge in Network Approach, DBTG Data manipulation.  | K6  |  |  |    |   |   |    |   |   |    |   |   |    |   |  |    |   |  |    |

|             |   |  |   |    |
|-------------|---|--|---|----|
| 4.          | COMPUTER APPLICATIONS<br>PRACTICALS I-<br>MS OFFICE AND<br>ORACLE | On the successful completion of the course, student will be able to:               |   |    |
|             |   | 1  | To prepare a word document with formatting and to use mail merge  | K6 |
|             |   | 2  | To create excel sheet and working with mathematics and statistics with functions                                  | K6 |
|             |   | 3  | Prepare a presentation  | K6 |
|             |   | 4  | Working with oracle and data operations   | K6 |
|             |   | 5  |   |    |
|             |   | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
| SEMESTER II |   |  |   |    |
| 5.          | CORPORATE ACCOUNTING  | On the successful completion of the course, student will be able to:               |   |    |
|             |   | 1  | Comprehend The Accounting Provisions In the Companies Act relating<br>To prepare the final accounts of a company. | K1 |
|             |   | 2  | Prepare accounts relating to Amalgamation, Absorption and Alteration<br>of share capital.                         | K2 |
|             |   | 3  | Prepare Accounts At the time of liquidation of  | K3 |



|           |                                  |  |  |        |  |  |
|-----------|----------------------------------|--|--|--------|--|--|
|           |                                  |  | companies.   |        |  |  |
|           |                                  | 4  | Develop the knowledge on various accounting aspects pertaining to valuation of shares, holding company accounts and banking and insurance companies    | K3     |  |  |
|           |                                  | 5  | Be familiar with the theoretical framework of Human resource accounting, Government accounting, Responsibility accounting and Environmental Accounting | K4     |  |  |
|           |                                  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |        |  |  |
| <b>6.</b> | <b>HUMAN RESOURCE MANAGEMENT</b> | On the successful completion of the course, student will be able to:               |  |        |  |  |
|           |                                  | 1  | Explain Human Resources Planning, Dealing With Surplus And Deficient Man power.  | K1     |  |  |
|           |                                  | 2  | Describe The Meanings of terminology and tools used in managing employees effectively.   | K2     |  |  |
|           |                                  | 3  | Prepare as election strategy for a specific job.   | K2& K3 |  |  |
|           |                                  | 4  | Gain knowledge in develop, analyze and apply advance training strategies and specifications for the delivery of training programs.                     | K4     |  |  |
|           |                                  | 5  | Compare and contrast the different techniques involved in the performance appraisal process, for example, the giving and receiving of feedback         | K5     |  |  |
|           |                                  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |        |  |  |
| <b>7.</b> | <b>BUSINESS RESEARCH METHODS</b> | On the successful completion of the course, student will be able to:               |  |        |  |  |
|           |                                  | 1  | Apply a range of quantitative and /or qualitative research techniques<br>in business and management problems/issues                                    | K1& K2 |  |  |

|    |                                      |  |  |        |
|----|--------------------------------------|--|--|--------|
|    |                                      | 2  | Organize And Conduct Research Using sampling method  | K2     |
|    |                                      | 3  | Develop Necessary Critical thinking skills in order to evaluate different statistical tools used in research.                            | K2&K3  |
|    |                                      | 4  | Demonstrate knowledge and understanding of data analysis and interpretation in relation to other research process by testing hypothesis. | K4     |
|    |                                      | 5  | Write A Research Report and thesis.  | K5&K6  |
|    |                                      | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |        |
| 8. | OBJECT ORIENTED PROGRAMMING WITH C++ | On the successful completion of the course, student will be able to:               |  |        |
|    |                                      | 1  | Outline The Essential Features And Elements Of The C++ programming language.   | K1 &K2 |
|    |                                      | 2  | Understand Concepts Of Inheritance and polymorphism.   | K2     |
|    |                                      | 3  | Understand the difference between function over loading and function Overriding  | K2 &K3 |
|    |                                      | 4  | Analyze, write, debug and test basic C++ codes using the approaches introduced in the course.  | K3 &K4 |
|    |                                      | 5  | Incorporate Exception Handling In Object-oriented programs.  | K5 &K6 |
|    |                                      | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |        |

|              |  |  |  |         |
|--------------|--|--|--|---------|
| 9.           | COMPUTER APPLICATIONS PRACTICALS-II: TALLY & C++ | On the successful completion of the course, student will be able to:               |  |         |
|              |  | 1  | Creation of vouchers, ledgers and Trial Balance in tally   | K3      |
|              |  | 2  | To prepare final accounts of companies/ ratios & stock summary   | K3      |
|              |  | 3  | To know the calculation of GST using tally.  | K3      |
|              |  | 4  | Preparation of cash flow, fund flow, final accounts and ratio to analyse the financial position                          | K3      |
|              |  | 5  | Applying C++ concepts as to create software for various calculations in connection with finance, costing and stock level |         |
|              |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |         |
| SEMESTER III |  |  |  |         |
| 10           | COST AND MANAGEMENT ACCOUNTING                   | On the successful completion of the course, student will be able to:               |  |         |
|              |  | 1  | Recall The Components Of cost  | K1      |
|              |  | 2  | Classify And Compare The Methods Of cost   | K2      |
|              |  | 3  | Construct Different Types of budget  | K3      |
|              |  | 4  | Apply Different cost variances and solve the adverse situations  | K3 & K6 |
|              |  | 5  | Analyze The Financial statements of a company  | K4      |
|              |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |         |

|         |                         |  |  |               |
|---------|-------------------------|--|--|---------------|
| 11<br>· | VISUAL BASIC            | On the successful completion of the course, student will be able to:               |  |               |
|         |                         | 1  | Recall Various Form Of Visuals   | K1            |
|         |                         | 2  | Understand Different Types Of intrinsic controls                                   | K2            |
|         |                         | 3  | Expert Knowledge about visual variable and procedure.                              | K3<br>&K<br>4 |
|         |                         | 4  | Analyze The Method of database working.  | K3<br>&K<br>4 |
|         |                         | 5  | Evaluate Different Types Of Data report  | K5<br>&K<br>6 |
|         |                         | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |               |
| 12<br>· | FINANCIAL<br>MANAGEMENT | On the successful completion of the course, student will be able to:               |  |               |
|         |                         | 1  | Recollect the concept and importance of financial management.                      | K1            |
|         |                         | 2  | Have thorough knowledge about various sources of long-term and short-term finance. | K2            |
|         |                         | 3  | Examine various method and technique for calculating cost of capital.              | K3            |
|         |                         | 4  | Examine different type leverage technique followed by a organization.              | K4<br>&K<br>5 |
|         |                         | 5  | Expert knowledge about various dividend policies.                                  | K5<br>&K<br>6 |

|                |  |  |  |               |  |
|----------------|--|--|--|---------------|--|
|                |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |               |  |
| <b>13</b><br>• | COMPUTER<br>APPLICATONS<br>PRACTICAL<br>III–VB | On the successful completion of the course, student will be able to:               |  |               |  |
|                |  | 1  | Prepare various financial and operating calculations with the tools available in VB.                   | K1            |  |
|                |  | 2  | Work with various connection of tools to create the back end for the data.                             | K2            |  |
|                |  | 3  | Work with various operations on data.  | K3            |  |
|                |  | 4  | Gain practical experience in preparation of reports using data environment and other connection tools. | K5<br>&<br>K6 |  |
|                |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |               |  |
| SEMESTER IV    |  |  |  |               |  |
| <b>14</b><br>• | INVESTMENT<br>MANAGEMENT                       | On the successful completion of the course, student will be able to:               |  |               |  |
|                |  | 1  | Recall Various Investment Avenues And Personal finance.  | K1            |  |
|                |  | 2  | Understand Securities Markets, regulation and its instruments  | K2            |  |

|           |                         |  |  |         |
|-----------|-------------------------|--|--|---------|
|           |                         | 3  | Examine fundamental analysis of an organization using financial data information.  | K3 &K 4 |
|           |                         | 4  | Examine technical analysis of an organization using financial data information.    | K3 &K 4 |
|           |                         | 5  | Evaluate Risk Return Of Securities indifferent investment proposal.                | K5 &K 6 |
|           |                         | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |         |
| <b>15</b> | <b>DIRECT TAXES</b>     | On the successful completion of the course, student will be able to:               |  |         |
|           |                         | 1  | Calculate Computation Of taxable income under various sources.                     | K4 & K5 |
|           |                         | 2  | Recollect The Concept Of Tax Administration And Practices.                         | K1 &k 2 |
|           |                         | 3  | Acquire The knowledge about the latest provision of income tax act.                | K3      |
|           |                         | 4  | Gain expert knowledge regarding the legitimate way of tax planning and management. | K6      |
|           |                         | 5  | Able To pertain procedure for assessment and e-filing.                             | K3 &k 6 |
|           |                         | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |  |         |
| <b>16</b> | <b>JAVA PROGRAMMING</b> | On the successful completion of the course, student will be able to:               |  |         |
|           |                         | 1  | It Help to understand the concept of Java and HTML                                 | K2      |

|  |          |  |   |    |
|--|----------|--|---|----|
|  | AND HTML | 2  | Be able to understand the difference between object oriented programming and procedural oriented language               | K3 |
|  |          | 3  | To familiarize the students with language environment and to implement various concepts related to language.            | K3 |
|  |          | 4  | It help the student to understand basic concept about control statements and reads.                                     | K5 |
|  |          | 5  | Understand how to insert the heading levels within a web page and insert ordered and unordered lists within a web page. | K2 |
|  |          | 6  |   |    |
|  |          | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |

## ELECTIVES

| S.<br>N<br>O | COURSE   | COURSE OUTCOME   |  |   |
|--------------|--|--|--|---|
| <b>1.</b>    | <b>SERVICES<br/>MARKETING</b>  | On The Successful completion of the course, student will be able to:       |  |   |
|              |  | 1  | Examine the nature of services, and distinguish between products and services  | K2  |
|              |  | 2  | Identify the major elements needed to improve the marketing of services  | K4  |
|              |  | 3  | Develop an understanding of the roles of relationship marketing and customer service in adding value to the customer's perception of a service | K4  |
|              |  | 4  | Examining the key marketing services and market segmentation   | K4  |
|              |  | 5  | Evaluating service quality, measurement, causes and problems, principles guiding improving of quality  | K5  |
|              |  | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b> |  |   |
|              |  | <b>2.</b>  | <b>MARKETING<br/>OF FINANCIAL<br/>SERVICES</b>   | On The Successful completion of the course, student will be able to |
| 1            | Understand marketing the of financial Services   |  |  | K2<br>&K<br>6   |
| 2            | Appreciate how recent thinking in marketing and services marketing Applies to financial services |  |  | K3  |
| 3            | Identify key issues for marketers of financial services  |  |  | K4  |
| 4            | Interpretation of various reforms and types of insurance services                                |  |  | K2  |



|           |  |   |  |    |  |
|-----------|--|---|--|----|--|
|           |  |   | Related to life insurance  |    |  |
|           |  | 5   | Discussing about the concepts based on real estate industry and their investment pattern in markets, securitization mechanism's merits in India. | K6 |  |
|           |  | <b>K1-Remember;K2-Understand;K3-Apply;K4-Analyze;K5-Evaluate;K6-Create</b>                |  |    |  |
|           |  |   |  |    |  |
| <b>3.</b> | <b>MARKETING OF HEALTH SERVICES</b>    | On the successful completion of the course, student will be able to:                      |  |    |  |
|           |  | 1   | Understand and critically and effectively apply a number of tools available to marketing managers in health care sector                          | K2 |  |
|           |  | 2   | Appreciate and exercise critical judgment in implementing the marketing strategies in the health care sector                                     | K5 |  |
|           |  | 3   | Analyse real-life situations and provide solutions to challenges   | K6 |  |
|           |  | 4   | Assessing various online critical judgment in implementing the marketing strategies in the health care sector                                    | K5 |  |
|           |  | 5   | Adapting various legal systems related to consumer rights & protection,<br>Promotion agencies and food nutrition's in India                      | K6 |  |
|           |  | <b>K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create</b> |  |    |  |
| <b>4.</b> | <b>TRAVEL AND HOSPITALITY SERVICES</b> | On the successful completion of the course, student will be able to:                      |  |    |  |

|  |  |  |   |    |
|--|--|--|---|----|
|  |  | 1  | Apply relevant technology for the production and management of Travel and hospitality experiences.          | K1 |
|  |  | 2  | Plan, lead, organize and control resources for effective and efficient Travel and hospitality operations.   | K2 |
|  |  | 3  | Create, apply, and evaluate marketing strategies for travel and Hospitality destinations and organizations. | K3 |
|  |  | 4  | Discussing about various hospitality services and its classification of Hotels by price level.              | K6 |
|  |  | 5  | Examining the various behavioural profile of users and related to hotel Marketing in Indian perspective.    | K4 |
|  |  | K1 - Remember; K2 - Understand; K3 -Apply; K4 -Analyze; K5 - Evaluate; K6 – Create |   |    |
|  |  |  |   |    |

## DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

### BCA

| <b>Program Specific Outcomes (PSOs)</b>                                      |   |
|--|---|
| After the successful completion of BCA program, the students are expected to |   |
| <b>PSO 1</b>   | Develop proficiency in problem solving and logical thinking skill.  |
| <b>PSO 2</b>   | To impart the knowledge of programming languages, web designing, networking and Software development cycle.   |
| <b>PSO 3</b>   | Enrich the communicative ability to present orally throughout all the stages of Software development process  |
| <b>PSO 4</b>   | Learn latest development and technologies in IT and Communications system.  |
| <b>PSO 5</b>   | Implementation of professional engineering solutions for the betterment of society keeping the environmental context in mind, be aware of professional ethics and be able to communicate effectively. |

| <b>Program Outcomes (POs)</b>               |   |
|---|---|
| On successful completion of the BCA program |   |
| PO1   | <b>Disciplinary knowledge:</b> Capable to apply the knowledge of mathematics, algorithmic principles and computing fundamentals in the modeling and design of computer based systems of varying complexity.   |
| PO2   | <b>Scientific reasoning/ Problem analysis:</b> Ability to critically analyze, categorizes, formulate and solve the problems that emerges in the field of computer science.  |
| PO3   | <b>Problem solving:</b> Able to provide software solutions for complex scientific and business related problems or processes that meet the specified needs with appropriate consideration for the public health and safety and the cultural, societal and environmental considerations. |
| PO4   | <b>Environment and sustainability:</b> Understand the impact of software solutions in environmental and societal context and strive for sustainable development.  |
| PO5   | <b>Modern tool usage:</b> Use contemporary techniques, skills and tools necessary for integrated solutions.   |
| PO6   | <b>Ethics:</b> Function effectively with social, cultural and ethical responsibility as an individual or as a team member with positive attitude.   |
| PO7   | <b>Cooperation / Team Work:</b> Function effectively as member or leader on multidisciplinary teams to accomplish a common objective.   |
| PO8   | <b>Communication Skills:</b> An ability to communicate effectively with diverse types of audience and also able to prepare and present technical documents to different groups.   |
| PO9   | <b>Self-directed and Life-long Learning:</b> Graduates will recognize the need for self-motivation to engage in lifelong learning to be in par with changing technology.  |
| PO10  | Enhance the research culture and uphold the scientific integrity and objectivity  |

## M.SC COMPUTER APPLICATIONS

| <b>Program Specific Outcomes (PSOs)</b>  |  |
|--|--|
| After the successful completion of <b>M.Sc. CS</b> program, the students are expected to |  |
| PSO1   | Able to analyze, design and develop problem solving skills in the discipline of computer science.  |
| PSO2   | Acquire evaluation of potential benefits of alternative solution in designing software and/or hardware systems in broad range of open source programming languages to withstand technological changes. |
| PSO3   | Able to pursue careers in IT industry/ consultancy/ research and development, teaching and allied areas related to computer science.   |
| PSO4   | Adapt to the continuous technological change in computational science and update themselves to meet the industry requirements and standards.   |
| PSO5   | Apply the practices and strategies of computer science for software project development to deliver a quality software product and contribute to research in the chosen field and perform effectively.  |

| <b>Program Outcomes (POs)</b>                           |  |
|---|--|
| On successful completion of the <b>M.Sc. CS</b> program |  |
| PO1   | Develop creativity and problem solving skills with the knowledge of computing and mathematics. |
| PO2   | Ability to develop and carry out experiments, interpret and infer data.                        |
| PO3   | Design algorithms and develop software to aid solutions to industry and governments.           |
| PO4   | Review the latest technology and tool handling mechanism.                                      |
| PO5   | Analyze the outcome to solve global environment related issues.                                |
| PO6   | Apply the knowledge in lifelong learning journey to equip themselves.                          |
| PO7   | Identify the perspective of business practices, risks and limitations.                         |
| PO8   | Work with professional and ethical values.   |
| PO9   | Formulate the responsibilities of human rights and entrepreneurial spirit.                     |
| PO10  | Understand the methods to communicate effectively and work collectively.                       |

## DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

**Course Name:** Bachelor of Computer Applications

**Course Code:** 3SC

**Year:** 2021-2022

| S.NO              | COURSE  | COURSE OUTCOME  |  |
|-------------------|---|---|--|
| <b>Semester I</b> |   |   |  |
| 1.                | Core 1:<br>Computing<br>Fundamentals<br>and C<br>Programming    | On the successful completion of the course, student will be able to:                        |  |
|                   |   | 1   | Learn about the Computer fundamentals and the Problem solving <b>K2</b>  |
|                   |   | 2   | Understand the basic concepts of C programming <b>K2</b>   |
|                   |   | 3   | Describe the reason why different decision making and loop constructs are available for iteration in C <b>K3</b>   |
|                   |   | 4   | Demonstrate the concept of User defined functions , Recursions , Scope and Lifetime of Variables, Structures and Unions <b>K4</b>  |
|                   |   | 5   | Develop C programs using pointers Arrays and file management <b>K3</b>   |
|                   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |
| 2.                | Core 2: Digital<br>Fundamentals<br>and Computer<br>Architecture | On the successful completion of the course, student will be able to:                        |  |
|                   |   | 1   | Learn the basic structure of number system methods like binary, octal and hexadecimal and understand the arithmetic and logical operations are performed by computers. <b>K3</b> |
|                   |   | 2   | Define the functions to simplify the Boolean equations using logic gates. <b>K1</b>  |
|                   |   | 3   | Understand various data transfer techniques in digital computer and control unit operations. <b>K2</b>   |
|                   |   | 4   | Compare the functions of the memory organization <b>K4</b>   |
|                   |   | 5   | Analyze architectures and computational designs concepts related to architecture organization and addressing modes <b>K4</b>   |
|                   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |
| 3.                | Core Lab 1:<br>Programming<br>Lab - C                           | On the successful completion of the course, student will be able to:                        |  |
|                   |   | 1   | Remember and Understand the logic for a given problem and to generate Prime numbers & Fibonacci Series <b>(Program-1,2,3)</b> <b>K1, K2</b>                                      |
|                   |   | 2   | Apply the concepts to print the Magic square, Sorting the data , Strings, Recursive functions and Pointers <b>(Program-4,5,6,8,10)</b> <b>K2, K3</b>                             |
|                   |   | 3   | Remember the logic used in counting the vowels in a sentence <b>(Program-7)</b> <b>K1</b>  |
|                   |   | 4   | Apply and Analyze the concepts of Structures and File management <b>(Program-9,11,12)</b> <b>K3&amp;K4</b>   |

|                    |   |  |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
|--------------------|---|--|---|---|----|---|--|----|---|---|----|---|--|----|---|---|-------|
|                    |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b>  |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 4.                 | Allied 1:<br>Mathematical Structures for Computer Science   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Remember the concepts of Matrices, Finding the solutions</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand the concept of Linear algebraic equations and solutions applicable in the field of science and technology</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Apply the techniques for the enormous field of applications in science and engineering</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Analyze the equations and rule's applied by using appropriate techniques</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Evaluate the numerical solutions with various statistical techniques and correlate with the relationship of various methods</td> <td>K1-K5</td> </tr> </table> <p><b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Crea</b></p>                                   | 1 | Remember the concepts of Matrices, Finding the solutions  | K1 | 2 | Understand the concept of Linear algebraic equations and solutions applicable in the field of science and technology | K2 | 3 | Apply the techniques for the enormous field of applications in science and engineering                  | K3 | 4 | Analyze the equations and rule's applied by using appropriate techniques | K4 | 5 | Evaluate the numerical solutions with various statistical techniques and correlate with the relationship of various methods | K1-K5 |
| 1                  | Remember the concepts of Matrices, Finding the solutions  | K1   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 2                  | Understand the concept of Linear algebraic equations and solutions applicable in the field of science and technology  | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 3                  | Apply the techniques for the enormous field of applications in science and engineering  | K3   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 4                  | Analyze the equations and rule's applied by using appropriate techniques  | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 5                  | Evaluate the numerical solutions with various statistical techniques and correlate with the relationship of various methods                                   | K1-K5  |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| <b>Semester II</b> |   |  |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 5.                 | Core 3: C++ Programming   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Illustrate and model real world objects and map it into programming objects for a legacy system.</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Identify the concepts of inheritance and its types and develop applications using overloading features.</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Discover the usage of pointers with classes</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Explain the usage of Files, templates and understand the importance of exception Handling</td> <td>K5</td> </tr> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b></p> | 1 | Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology | K1 | 2 | Illustrate and model real world objects and map it into programming objects for a legacy system.                     | K2 | 3 | Identify the concepts of inheritance and its types and develop applications using overloading features. | K3 | 4 | Discover the usage of pointers with classes                              | K4 | 5 | Explain the usage of Files, templates and understand the importance of exception Handling                                   | K5    |
| 1                  | Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology | K1   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 2                  | Illustrate and model real world objects and map it into programming objects for a legacy system.  | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 3                  | Identify the concepts of inheritance and its types and develop applications using overloading features.   | K3   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 4                  | Discover the usage of pointers with classes   | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 5                  | Explain the usage of Files, templates and understand the importance of exception Handling   | K5   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 6.                 | Core Lab 2: Programming Lab - C++   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Illustrate and model real world objects and map it into programming objects for a legacy system.</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Identify the concepts of inheritance and its types and develop applications using overloading features.</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Discover the usage of pointers with classes</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Explain the usage of Files, templates and understand the importance of exception Handling</td> <td>K5</td> </tr> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b></p> | 1 | Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology | K1 | 2 | Illustrate and model real world objects and map it into programming objects for a legacy system.                     | K2 | 3 | Identify the concepts of inheritance and its types and develop applications using overloading features. | K3 | 4 | Discover the usage of pointers with classes                              | K4 | 5 | Explain the usage of Files, templates and understand the importance of exception Handling                                   | K5    |
| 1                  | Define the different programming paradigm such as procedure oriented and object oriented programming methodology and conceptualize elements of OO methodology | K1   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 2                  | Illustrate and model real world objects and map it into programming objects for a legacy system.  | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 3                  | Identify the concepts of inheritance and its types and develop applications using overloading features.   | K3   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 4                  | Discover the usage of pointers with classes   | K4   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 5                  | Explain the usage of Files, templates and understand the importance of exception Handling   | K5   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |
| 7.                 | Core Lab 3: Internet Basics   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the fundamentals of Internet and the Web concepts</td> <td>K2</td> </tr> <tr> <td>2</td> <td>Explain the usage of internet concepts and analyze its components.</td> <td>K2</td> </tr> </table>  | 1 | Understand the fundamentals of Internet and the Web concepts  | K2 | 2 | Explain the usage of internet concepts and analyze its components.   | K2 |   |   |    |   |  |    |   |   |       |
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| 2                  | Explain the usage of internet concepts and analyze its components.  | K2   |   |   |    |   |  |    |   |   |    |   |  |    |   |   |       |

|                     |                                      |   |  |           |
|---------------------|--------------------------------------|---|--|-----------|
|                     |                                      | 3   | Identify and apply the online information resources  | K3        |
|                     |                                      | 4   | Inspect and utilize the appropriate Google Apps for education effectively  | K3,K4     |
|                     |                                      | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |           |
| 8.                  | Allied 2:<br>Discrete<br>Mathematics | On the successful completion of the course, student will be able to:                        |  |           |
|                     |                                      | 1   | Assimilate various graph theoretic concepts and familiarize with their applications.   | K1        |
|                     |                                      | 2   | Understand the concept of mathematical Logic , basic logical operations, Predicate calculus  | K2        |
|                     |                                      | 3   | Apply the partial order relations ,set order of relations, composite functions   | K3        |
|                     |                                      | 4   | Analyze the operations on Languages and types of grammar, regular expressions , finite state automata and finite state machine     | K4        |
|                     |                                      | 5   | Demonstrate skill to construct graph and different types of tree Algorithms.   | K1-<br>K5 |
|                     |                                      | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |           |
| <b>Semester III</b> |                                      |   |  |           |
| 9.                  | Core 4: Data<br>Structures           | On the successful completion of the course, student will be able to:                        |  |           |
|                     |                                      | 1   | Understand the basic concepts of data structures and algorithms  | K1-K2     |
|                     |                                      | 2   | Construct and analyze of stack and queue operations with illustrations   | K2-K4     |
|                     |                                      | 3   | Enhance the knowledge of Linked List and dynamic storage management.   | K2-K3     |
|                     |                                      | 4   | Demonstrate the concept of trees and its applications  | K2-K3     |
|                     |                                      | 5   | Design and implement various sorting and searching algorithms for applications and understand the concept of file organizations    | K1-K4     |
|                     |                                      | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |  |           |
| 10.                 | Core 5: Java<br>Programming          | On the successful completion of the course, student will be able to:                        |  |           |
|                     |                                      | 1   | The competence and the development of small to medium sized application programs that demonstrate professionally acceptable coding | K1-<br>K2 |
|                     |                                      | 2   | Demonstrate the concept of object oriented programming through Java  | K2-<br>K4 |
|                     |                                      | 3   | Apply the concept of Inheritance, Modularity, Concurrency, Exceptions handling and data persistence to develop java program        | K3        |
|                     |                                      | 4   | Develop java programs for applets and graphics programming   | K3        |
|                     |                                      | 5   | Understand the fundamental concepts of AWT controls, layouts and events  | K1-<br>K2 |

|                    |   |  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
|--------------------|---|--|---|---|--------|---|---|-------|---|---|--------|---|---|-------|---|--|-------|
|                    |   | <b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 11.                | Core Lab<br>4:Programming<br>Lab - Java   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the basic concepts of Java Programming with emphasis on ethics and principles of professional coding</td> <td>K1, K2</td> </tr> <tr> <td>2</td> <td>Demonstrate the creation of objects, classes and methods and the concepts of constructor, methods overloading, Arrays, branching and looping</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Create data files and Design a page using AWT controls and Mouse Events in Java programming Implement the concepts of code reusability and debugging.</td> <td>K2, K3</td> </tr> <tr> <td>4</td> <td>Develop applications using Strings, Interfaces and Packages and applets</td> <td>K3</td> </tr> <tr> <td>5</td> <td>Construct Java programs using Multithreaded Programming and Exception Handling</td> <td>K3</td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p> | 1 | Understand the basic concepts of Java Programming with emphasis on ethics and principles of professional coding | K1, K2 | 2 | Demonstrate the creation of objects, classes and methods and the concepts of constructor, methods overloading, Arrays, branching and looping                      | K2    | 3 | Create data files and Design a page using AWT controls and Mouse Events in Java programming Implement the concepts of code reusability and debugging. | K2, K3 | 4 | Develop applications using Strings, Interfaces and Packages and applets | K3    | 5 | Construct Java programs using Multithreaded Programming and Exception Handling | K3    |
| 1                  | Understand the basic concepts of Java Programming with emphasis on ethics and principles of professional coding   | K1, K2   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 2                  | Demonstrate the creation of objects, classes and methods and the concepts of constructor, methods overloading, Arrays, branching and looping                      | K2   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 3                  | Create data files and Design a page using AWT controls and Mouse Events in Java programming Implement the concepts of code reusability and debugging.             | K2, K3   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 4                  | Develop applications using Strings, Interfaces and Packages and applets   | K3   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 5                  | Construct Java programs using Multithreaded Programming and Exception Handling  | K3   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 12.                | Allied 3:<br>Computer<br>Based<br>Optimization<br>Techniques  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Remember the basic concepts and application of operations research in various fields.</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand the principles of construction of mathematical models of conflicting situations using the Linear Programming, Build and solve transportation problems.</td> <td>K2</td> </tr> <tr> <td>3</td> <td>Apply game theory concepts to articulate real-world situations by identifying, analyzing and practicing strategic decisions.</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Analyze and extend the queueing models in real world systems.</td> <td>K4</td> </tr> <tr> <td>5</td> <td>Apply concepts in optimal scheduling using PERT and CPM</td> <td>K1-K5</td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p>   | 1 | Remember the basic concepts and application of operations research in various fields.                           | K1     | 2 | Understand the principles of construction of mathematical models of conflicting situations using the Linear Programming, Build and solve transportation problems. | K2    | 3 | Apply game theory concepts to articulate real-world situations by identifying, analyzing and practicing strategic decisions.                          | K3     | 4 | Analyze and extend the queueing models in real world systems.           | K4    | 5 | Apply concepts in optimal scheduling using PERT and CPM                        | K1-K5 |
| 1                  | Remember the basic concepts and application of operations research in various fields.   | K1   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 2                  | Understand the principles of construction of mathematical models of conflicting situations using the Linear Programming, Build and solve transportation problems. | K2   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 3                  | Apply game theory concepts to articulate real-world situations by identifying, analyzing and practicing strategic decisions.                                      | K3   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 4                  | Analyze and extend the queueing models in real world systems.   | K4   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 5                  | Apply concepts in optimal scheduling using PERT and CPM   | K1-K5  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 13.                | Skill based<br>Subject 1: Web<br>Programming  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the basic concepts of Internet, WWW, browsers and Email and protocols.</td> <td>K1</td> </tr> <tr> <td>2</td> <td>Understand and apply the HTML, HTML elements and formatting styles</td> <td>K1-K3</td> </tr> <tr> <td>3</td> <td>Knowledge on creating tables, forms and DHTML</td> <td>K3</td> </tr> <tr> <td>4</td> <td>Understand the structure of XML document, DTD and Schema</td> <td>K1-K3</td> </tr> <tr> <td>5</td> <td>Knowledge on working with SML, Style sheets and XSL</td> <td>K1-K4</td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p>  | 1 | Understand the basic concepts of Internet, WWW, browsers and Email and protocols.                               | K1     | 2 | Understand and apply the HTML, HTML elements and formatting styles  | K1-K3 | 3 | Knowledge on creating tables, forms and DHTML   | K3     | 4 | Understand the structure of XML document, DTD and Schema                | K1-K3 | 5 | Knowledge on working with SML, Style sheets and XSL                            | K1-K4 |
| 1                  | Understand the basic concepts of Internet, WWW, browsers and Email and protocols.   | K1   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 2                  | Understand and apply the HTML, HTML elements and formatting styles  | K1-K3  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 3                  | Knowledge on creating tables, forms and DHTML   | K3   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 4                  | Understand the structure of XML document, DTD and Schema  | K1-K3  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 5                  | Knowledge on working with SML, Style sheets and XSL   | K1-K4  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| <b>Semester IV</b> |   |  |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |
| 14.                | Core 6: System<br>Software and  | On the successful completion of the course, student will be able to:   |   |   |        |   |   |       |   |   |        |   |   |       |   |  |       |



|     |   |   |   |               |
|-----|---|---|---|---------------|
|     | Operating System                            | 1   | Know the program generation and program execution activities in detail  | K1            |
|     |   | 2   | Understand the concepts of Macro Expansions and Gain the knowledge of Editing processes   | K2-K3         |
|     |   | 3   | Remember the basic concepts of operating system   | K1            |
|     |   | 4   | Understand the concepts like interrupts, deadlock , memory management and file management   | K2            |
|     |   | 5   | Analyze the need for scheduling algorithms and implement different algorithms used for representation, scheduling, and allocation in DOS and UNIX operating system.     | K1-K4         |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |               |
| 15. | Core 7: Linux and Shell Programming         | On the successful completion of the course, student will be able to:                        |   |               |
|     |   | 1   | Describe the architecture and features of Linux Operating System and distinguish it from other Operating System.  | K1            |
|     |   | 2   | Develop Linux utilities to perform File processing, Directory handling, User Management and display system configuration  | K2-K3         |
|     |   | 3   | Develop shell scripts using pipes, redirection, filters and Pipes   | K2            |
|     |   | 4   | Apply and change the ownership and file permissions using advance Unix commands.  | K3            |
|     |   | 5   | Build Regular expression to perform pattern matching using utilities and implement shell scripts for real time applications.  | K3-K6         |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |               |
| 16. | Core Lab 5: Linux and Shell Programming Lab | On the successful completion of the course, student will be able to:                        |   |               |
|     |   | 1   | Develop Linux utilities to perform File processing, Directory handling and User Management  | <b>K1, K2</b> |
|     |   | 2   | Understand and develop shell scripts using pipes, redirection, filters, Pipes and display system configuration  | <b>K2-K3</b>  |
|     |   | 3   | Develop simple shell scripts applicable to file access permission network Administration  | <b>K3</b>     |
|     |   | 4   | Apply and change the ownership and file permissions using advance Unix commands.  | K4-K5         |
|     |   | 5   | Create shell scripts for real time applications.  | <b>K6</b>     |
|     |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |               |
| 17. | Allied 4: Business Accounting               | On the successful completion of the course, student will be able to:                        |   |               |
|     |   | 1   | Recalling Accounting Concepts and Conventions and use Accounting rules to record business transactions in the form of Journal, Ledger and preparation of Trial Balance. | K1            |
|     |   | 2   | Understand the concept and to prepare trading, profit and loss account and balance sheet  | K2,K3         |
|     |   | 3   | To prepare cost sheet and analyze the cost effectiveness  | K3,K4         |
|     |   | 4   | To prepare different budgets required for the concern   | K6            |

|                   |  |  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
|-------------------|--|--|---|--|------------------|---|--|--------------|---|--|--------------|---|---|--------------|---|---|--------------|
|                   |  | <b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 18.               | Skill based<br>Subject 2 Lab:<br>Web<br>Programming –<br>Lab   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the problems and create applications in basics of web programming</td> <td><b>K2-K4, K6</b></td> </tr> <tr> <td>2</td> <td>Understand and develop Web pages with formatting styles.</td> <td><b>K2-K3</b></td> </tr> <tr> <td>3</td> <td>Apply the features in HTML to present the details given</td> <td><b>K3</b></td> </tr> <tr> <td>4</td> <td>Analyze the problem, apply the concept for developing applications</td> <td><b>K4-K5</b></td> </tr> <tr> <td>5</td> <td>Create web sites of real time applications</td> <td><b>K6</b></td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p>   | 1 | Understand the problems and create applications in basics of web programming                                       | <b>K2-K4, K6</b> | 2 | Understand and develop Web pages with formatting styles.   | <b>K2-K3</b> | 3 | Apply the features in HTML to present the details given  | <b>K3</b>    | 4 | Analyze the problem, apply the concept for developing applications                          | <b>K4-K5</b> | 5 | Create web sites of real time applications  | <b>K6</b>    |
| 1                 | Understand the problems and create applications in basics of web programming                                       | <b>K2-K4, K6</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 2                 | Understand and develop Web pages with formatting styles.   | <b>K2-K3</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 3                 | Apply the features in HTML to present the details given  | <b>K3</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 4                 | Analyze the problem, apply the concept for developing applications   | <b>K4-K5</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 5                 | Create web sites of real time applications   | <b>K6</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| <b>Semester V</b> |  |  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 19.               | Core 8:<br>RDBMS &<br>Oracle   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the basic concepts of Relational Data Model, Entity- Relationship Model and process of Normalization</td> <td><b>K1-K2</b></td> </tr> <tr> <td>2</td> <td>Understand and construct database using Structured Query Language (SQL) in Oracle9i environment.</td> <td><b>K1-K3</b></td> </tr> <tr> <td>3</td> <td>Learn basics of PL/SQL and develop programs using Cursors, Exceptions, Procedures and Functions.</td> <td><b>K1-K4</b></td> </tr> <tr> <td>4</td> <td>Understand and use built-in functions and enhance the knowledge of handling multiple tables</td> <td><b>K1-K3</b></td> </tr> <tr> <td>5</td> <td>Attain a good practical skill of managing and retrieving of data using Data Manipulation Language (DML)</td> <td><b>K2-K4</b></td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p> | 1 | Understand the basic concepts of Relational Data Model, Entity- Relationship Model and process of Normalization    | <b>K1-K2</b>     | 2 | Understand and construct database using Structured Query Language (SQL) in Oracle9i environment. | <b>K1-K3</b> | 3 | Learn basics of PL/SQL and develop programs using Cursors, Exceptions, Procedures and Functions. | <b>K1-K4</b> | 4 | Understand and use built-in functions and enhance the knowledge of handling multiple tables | <b>K1-K3</b> | 5 | Attain a good practical skill of managing and retrieving of data using Data Manipulation Language (DML) | <b>K2-K4</b> |
| 1                 | Understand the basic concepts of Relational Data Model, Entity- Relationship Model and process of Normalization    | <b>K1-K2</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 2                 | Understand and construct database using Structured Query Language (SQL) in Oracle9i environment.                   | <b>K1-K3</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 3                 | Learn basics of PL/SQL and develop programs using Cursors, Exceptions, Procedures and Functions.                   | <b>K1-K4</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 4                 | Understand and use built-in functions and enhance the knowledge of handling multiple tables                        | <b>K1-K3</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 5                 | Attain a good practical skill of managing and retrieving of data using Data Manipulation Language (DML)            | <b>K2-K4</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 20.               | Core 9: Visual<br>Basic  | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Demonstrate fundamental skills in utilizing the tools of a visual environment such as command, menus and toolbars.</td> <td><b>K1</b></td> </tr> <tr> <td>2</td> <td>Implement SDI and MDI applications using forms, dialogs and other types of GUI components.</td> <td><b>K2</b></td> </tr> <tr> <td>3</td> <td>Understand the connectivity between VB with MS-ACCESS database.</td> <td><b>K3</b></td> </tr> <tr> <td>4</td> <td>Implement the methods and techniques to develop projects.</td> <td><b>K4</b></td> </tr> <tr> <td>5</td> <td>Attain a good practical skill of managing ODBC and Data Access Objects</td> <td><b>K2-K4</b></td> </tr> </table> <p><b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create</p>  | 1 | Demonstrate fundamental skills in utilizing the tools of a visual environment such as command, menus and toolbars. | <b>K1</b>        | 2 | Implement SDI and MDI applications using forms, dialogs and other types of GUI components.       | <b>K2</b>    | 3 | Understand the connectivity between VB with MS-ACCESS database.                                  | <b>K3</b>    | 4 | Implement the methods and techniques to develop projects.                                   | <b>K4</b>    | 5 | Attain a good practical skill of managing ODBC and Data Access Objects                                  | <b>K2-K4</b> |
| 1                 | Demonstrate fundamental skills in utilizing the tools of a visual environment such as command, menus and toolbars. | <b>K1</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 2                 | Implement SDI and MDI applications using forms, dialogs and other types of GUI components.                         | <b>K2</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 3                 | Understand the connectivity between VB with MS-ACCESS database.  | <b>K3</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 4                 | Implement the methods and techniques to develop projects.  | <b>K4</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 5                 | Attain a good practical skill of managing ODBC and Data Access Objects   | <b>K2-K4</b>   |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 21.               | Core Lab 6:<br>Programming<br>Lab – VB &<br>Oracle   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tr> <td>1</td> <td>Understand the concepts of Visual Basic.</td> <td><b>K1</b></td> </tr> <tr> <td>2</td> <td>Learn the advantages of Controls in VB</td> <td><b>K2</b></td> </tr> <tr> <td>3</td> <td>Design and develop the event- driven applications using Visual Basic framework.</td> <td><b>K3</b></td> </tr> <tr> <td>4</td> <td>Apply the knowledge of database methods.</td> <td><b>K4</b></td> </tr> </table>   | 1 | Understand the concepts of Visual Basic.   | <b>K1</b>        | 2 | Learn the advantages of Controls in VB   | <b>K2</b>    | 3 | Design and develop the event- driven applications using Visual Basic framework.                  | <b>K3</b>    | 4 | Apply the knowledge of database methods.  | <b>K4</b>    |   |   |              |
| 1                 | Understand the concepts of Visual Basic.   | <b>K1</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 2                 | Learn the advantages of Controls in VB   | <b>K2</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 3                 | Design and develop the event- driven applications using Visual Basic framework.                                    | <b>K3</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |
| 4                 | Apply the knowledge of database methods.   | <b>K4</b>  |   |  |                  |   |  |              |   |  |              |   |   |              |   |   |              |

|                    |   |   |   |                   |
|--------------------|---|---|---|-------------------|
|                    |   | 5   | Learn basics of PL/SQL and develop programs using Cursors, Exceptions, Procedures and Functions   | <b>K6</b>         |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 22.                | Elective – I:<br>PHP &<br>Scripting<br>Language                         | On the successful completion of the course, student will be able to:                        |   |                   |
|                    |   | 1   | Understand the basics of .VB script and Java script   | <b>K1</b>         |
|                    |   | 2   | Understand the I/O handling, data validation, Activex control and validation  | <b>K2</b>         |
|                    |   | 3   | Understand and remember the java script objects, form validations, cookies and plugins  | <b>K2</b>         |
|                    |   | 4   | Understand the sever side scripting language basics   | <b>K3</b>         |
|                    |   | 5   | Knowledge on PHP objects, cookies, connecting remote files, and database connections  | <b>K2-<br/>K4</b> |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 23.                | Skill based<br>Subject 3:<br>CASE Tools<br>Concepts and<br>Applications | On the successful completion of the course, student will be able to:                        |   |                   |
|                    |   | 1   | Understand the basic concepts of software engineering   | <b>K1</b>         |
|                    |   | 2   | Apply the software engineering models in developing software applications   | <b>K2-<br/>K3</b> |
|                    |   | 3   | Implement the object oriented design in various projects  | <b>K4</b>         |
|                    |   | 4   | Knowledge on how to do a software project with in-depth analysis.   | <b>K3</b>         |
|                    |   | 5   | To inculcate knowledge on Software engineering concepts in turn gives a roadmap to design a new software project.   | <b>K1-<br/>K4</b> |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| <b>Semester VI</b> |   |   |   |                   |
| 24.                | Core 10:<br>Graphics &<br>Multimedia                                    | On the successful completion of the course, student will be able to:                        |   |                   |
|                    |   | 1   | Explain applications, principles, commonly used and techniques of computer graphics and algorithms for Line-Drawing, Circle- Generating and Ellipse-Generating. | <b>K2</b>         |
|                    |   | 2   | Students will get the concepts of 2D and 3D, Viewing, Curves and surfaces, Hidden Line/surface elimination techniques   | <b>K3</b>         |
|                    |   | 3   | Studies concepts of Multimedia Systems, Text, Audio and Video tools   | <b>K3</b>         |
|                    |   | 4   | Compressing audio and video using MPEG-1 and MPEG-2   | <b>K4</b>         |
|                    |   | 5   | Creates Animation with special effects using algorithms   | <b>K6</b>         |
|                    |   | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 25.                | Core 11:<br>Project Work<br>Lab %%                                      | On the successful completion of the course, student will be able to:                        |   |                   |
|                    |   | 1   | Formulate a real world problem and develop its requirements develop a design solution for a set of requirements.  | <b>K3</b>         |
|                    |   | 2   | Test and validate the conformance of the developed prototype against the original requirements of the problem.  | <b>K5</b>         |

|     |  |   |   |                   |
|-----|--|---|---|-------------------|
|     |  | 3   | Work as a responsible member and possibly a leader of a team in developing software solutions.  | <b>K3</b>         |
|     |  | 4   | Express technical ideas, strategies and methodologies in written form. Self-learn new tools, algorithms and techniques that contribute to the software solution of the project.         | <b>K1-<br/>K4</b> |
|     |  | 5   | Generate alternative solutions, compare them and select the optimum one.  | <b>K6</b>         |
|     |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 26. | Core 7:<br>Programming<br>Lab – Graphics<br>& Multimedia | On the successful completion of the course, student will be able to:                        |   |                   |
|     |  | 1   | Understand the basic concepts of computer graphics.   | <b>K1</b>         |
|     |  | 2   | Design scan conversion problems using C and C++ programming.  | <b>K2</b>         |
|     |  | 3   | Apply clipping and filling techniques for modifying an object.  | <b>K3</b>         |
|     |  | 4   | Understand the concepts of different type of geometric transformation of objects in 2D.   | <b>K4</b>         |
|     |  | 5   | Understand and develop the practical implementation of modeling, rendering, viewing of objects in 2D  | <b>K6</b>         |
|     |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 27. | Elective – II:<br>Computer<br>Networks                   | On the successful completion of the course, student will be able to:                        |   |                   |
|     |  | 1   | Remember the organization of computer networks, factors influencing computer network development and the reasons for having variety of different types of networks.                     | <b>K1</b>         |
|     |  | 2   | Understand Internet structure and can see how standard problems are solved and the use of cryptography and network security.  | <b>K2</b>         |
|     |  | 3   | Apply knowledge of different techniques of error detection and correction to detect and solve error bit during data transmission.   | <b>K3</b>         |
|     |  | 4   | Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies  | <b>K4</b>         |
|     |  | 5   | Knowledge about different computer networks, reference models and the functions of each layer in the models   | <b>K2-<br/>K4</b> |
|     |  | <b>K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create</b> |   |                   |
| 28. | Elective – III:<br>Web Services                          | On the successful completion of the course, student will be able to:                        |   |                   |
|     |  | 1   | Understand about the distributed computing, web services, technologies and applications, XML document (WSDL) and the concepts of XML, protocol (SOAP), locating the remote web services | <b>K1</b>         |
|     |  | 2   | Understand the concepts of UDDI and its specifications, Understand the concepts of system interface and its workflow, the common attacks.   | <b>K2</b>         |

|     |   |   |  |               |
|-----|---|---|--|---------------|
|     |   | 3   | Examining the concepts of architecture of system to meet the user requirements and analyse the concepts of mobile and wireless services, Design and develop the real-world enterprise applications using web services. | <b>K3</b>     |
|     |   | 4   | Analysing the steps necessary to build and deploy the web services.  | <b>K4</b>     |
|     |   | 5   | Applying the applications created based on the web services on different web servers.  | <b>K4-K6</b>  |
|     |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |               |
| 29. | Skill Based<br>Subject 4 :<br>CASE Tools<br>Lab | On the successful completion of the course, student will be able to:                        |  |               |
|     |   | 1   | Prepare the CASE tools for the given specification.  | <b>K1, K2</b> |
|     |   | 2   | Understand and develop the UML diagram for real time applications.   | <b>K2-K3</b>  |
|     |   | 3   | Design the real time test cases  | <b>K3</b>     |
|     |   | 4   | Analyze the development of CASE tools  | <b>K4-K5</b>  |
|     |   | 5   | Design the CASE tools and generate VB code   | <b>K6</b>     |
|     |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 – Create</b> |  |               |

## DEPARTMENT OF COMPUTER SCIENCE & APPLICATIONS

**Course Name:** M.Sc Computer Science

**Course Code:** 4SC

**Year:** 2021-2022

| S.NO              | COURSE  | COURSE OUTCOME   |  |       |
|-------------------|---|--|--|-------|
| <b>Semester I</b> |   |  |  |       |
| 1.                | Paper I :<br>Analysis &<br>Design of<br>Algorithms            | On the successful completion of the course, student will be able to:   |  |       |
|                   |   | 1  | Get knowledge about algorithms and determines their time complexity. Demonstrate specific search and sort algorithms using divide and conquer technique. | K1,K2 |
|                   |   | 2  | Gain good understanding of Greedy method and its algorithm.  | K2,K3 |
|                   |   | 3  | Able to describe about graphs using dynamic programming technique.   | K3,K4 |
|                   |   | 4  | Demonstrate the concept of backtracking & branch and bound technique.  | K5,K6 |
|                   |   | 5  | Explore the traversal and searching technique and apply it for trees and graphs.   | K6    |
|                   |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |       |
| 2.                | Paper II : Object<br>Oriented<br>Analysis and<br>Design & C++ | On the successful completion of the course, student will be able to:   |  |       |
|                   |   | 1  | Understand the concept of Object-Oriented development and modeling techniques  | K1,K2 |
|                   |   | 2  | Gain knowledge about the various steps performed during object design  | K2,K3 |
|                   |   | 3  | Abstract object-based views for generic software systems   | K3    |
|                   |   | 4  | Link OOAD with C++ language  | K4,K5 |
|                   |   | 5  | Apply the basic concept of OOPs and familiarize to write C++ program   | K5,K6 |
|                   |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |       |
| 3.                | Paper III :<br>Python<br>Programming                          | On the successful completion of the course, student will be able to:   |  |       |
|                   |   | 1  | Understand the basic concepts of Python Programming  | K1,K2 |
|                   |   | 2  | Understand File operations, Classes and Objects  | K2,K3 |
|                   |   | 3  | Acquire Object Oriented Skills in Python   | K3,K4 |
|                   |   | 4  | Develop web applications using Python  | K5    |
|                   |   | 5  | Develop Client Server Networking applications  | K5,K6 |
|                   |   | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |  |       |
| 4.                | Paper IV :<br>Advanced<br>Software<br>Engineering             | On the successful completion of the course, student will be able to:   |  |       |
|                   |   | 1  | Understand about Software Engineering process  | K1,K2 |
|                   |   | 2  | Understand about Software project management skills, design and quality management   | K2,K3 |
|                   |   | 3  | Analyze on Software Requirements and Specification   | K3,K4 |

|                    |                                       |  |   |       |
|--------------------|---------------------------------------|--|---|-------|
|                    |                                       | 4  | Analyze on Software Testing, Maintenance and Software Re-Engineering  | K4,K5 |
|                    |                                       | 5  | Design and conduct various types and levels of software quality for a software project  | K5,K6 |
|                    |                                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |       |
| 5.                 | Practical I : Algorithm and OOPS Lab  | On the successful completion of the course, student will be able to:   |   |       |
|                    |                                       | 1  | Understand the concepts of object oriented with respect to C++  | K1,K2 |
|                    |                                       | 2  | Able to understand and implement OOPS concepts  | K3,K4 |
|                    |                                       | 3  | Implementation of data structures like Stack, Queue, Tree , List using C++  | K4,K5 |
|                    |                                       | 4  | Application of the data structures for Sorting, Searching using different techniques.   | K5,K6 |
|                    |                                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |       |
| 6.                 | Practical II : Python Programming Lab | On the successful completion of the course, student will be able to:   |   |       |
|                    |                                       | 1  | Able to write programs in Python using OOPS concepts  | K1,K2 |
|                    |                                       | 2  | To understand the concepts of File operations and Modules in Python   | K2,K3 |
|                    |                                       | 3  | Implementation of lists, dictionaries, sets and tuples as programs  | K3,K4 |
|                    |                                       | 4  | To develop web applications using Python  | K5,K6 |
|                    |                                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |       |
| <b>Semester II</b> |                                       |  |   |       |
| 7.                 | Paper V : Data Mining and Warehousing | On the successful completion of the course, student will be able to:   |   |       |
|                    |                                       | 1  | Understand the basic data mining techniques and algorithms  | K1,K2 |
|                    |                                       | 2  | Understand the Association rules, Clustering techniques and Data warehousing contents   | K2,K3 |
|                    |                                       | 3  | Compare and evaluate different data mining techniques like classification, prediction, Clustering and association rule mining | K4,K5 |
|                    |                                       | 4  | Design data warehouse with dimensional modeling and apply OLAP operations   | K5,K6 |
|                    |                                       | 5  | Identify appropriate data mining algorithms to solve real world problems  | K6    |
|                    |                                       | <b>K1</b> - Remember; <b>K2</b> - Understand; <b>K3</b> - Apply; <b>K4</b> - Analyze; <b>K5</b> - Evaluate; <b>K6</b> - Create |   |       |
| 8.                 | Paper VI: Advanced Operating Systems  | On the successful completion of the course, student will be able to:   |   |       |
|                    |                                       | 1  | Understand the design issues associated with operating systems  | K1,K2 |
|                    |                                       | 2  | Master various process management concepts including scheduling, deadlocks and distributed file systems                       | K3,K4 |
|                    |                                       | 3  | Prepare Real Time Task Scheduling   | K4,K5 |
|                    |                                       | 4  | Analyze Operating Systems for Handheld Systems  | K5    |
|                    |                                       | 5  | Analyze Operating Systems like LINUX and iOS  | K5,K6 |

|     |  |   |   |  |
|-----|--|---|---|--|
|     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |  |
| 9.  | Paper VII:<br>Advanced Java<br>Programming                               | On the successful completion of the course, student will be able to:                        |   |  |
|     |  | 1   | Understand the advanced concepts of Java Programming  | K1,K2  |
|     |  | 2   | Understand JDBC and RMI concepts  | K2,K3  |
|     |  | 3   | Apply and analyze Java in Database  | K3,K4  |
|     |  | 4   | Handle different event in java using the delegation event model, event listener and class   | K5   |
|     |  | 5   | Design interactive applications using Java Servlet, JSP and JDBC  | K5,K6  |
|     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |  |
| 10. | Paper VIII :<br>Artificial<br>Intelligence &<br>Machine<br>Learning      | On the successful completion of the course, student will be able to:                        |   |  |
|     |  | 1   | Demonstrate AI problems and techniques  | K1,K2  |
|     |  | 2   | Understand machine learning concepts  | K2,K3  |
|     |  | 3   | Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning | K3,K4  |
|     |  | 4   | Analyze the impact of machine learning on applications  | K4,K5  |
|     |  | 5   | Analyze and design a real world problem for implementation and understand the dynamic behavior of a system                            | K5,K6  |
|     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |  |
| 11. | Elective – I:<br>Internet of<br>Things                                   | On the successful completion of the course, student will be able to:                        |   |  |
|     |  | 1   | Understand about IoT, its Architecture and its Applications   | K1,K2  |
|     |  | 2   | Understand basic electronics used in IoT & its role   | K2,K3  |
|     |  | 3   | Develop applications with C using Arduino IDE   | K4   |
|     |  | 4   | Analyze about sensors and actuators   | K5,K6  |
|     |  | 5   | Design IoT in real time applications using today's internet & wireless technologies   | K6   |
|     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |  |
| 12. | Practical III:<br>Data Mining<br>Lab using R                             | On the successful completion of the course, student will be able to:                        |   |  |
|     |  | 1   | Able to write programs using R for Association rules, Clustering techniques   | K1,K2  |
|     |  | 2   | To implement data mining techniques like classification, prediction   | K2,K3  |
|     |  | 3   | Able to use different visualizations techniques using R   | K4,K5  |
|     |  | 4   | To apply different data mining algorithms to solve real world applications  | K5,K6  |
|     |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |  |
|     |  | 13.   | Practical IV:<br>Advanced Java<br>Programming<br>Lab  | On the successful completion of the course, student will be able to: |
| 1   | Understand to the implement concepts of Java using HTML forms, JSP & JAR |   |   | K1,K2  |
| 2   | Must be capable of implementing JDBC and RMI concepts                    |   |   | K3,K4  |
| 3   | Able to write Applets with Event handling mechanism                      |   |   | K4,K5  |



|   |  |  |  |       |
|---|--|--|--|-------|
|   |  | 4  | To Create interactive web based applications using servlets and jsp  | K5,K6 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |  |       |
| <b>Semester III</b>   |  |  |  |       |
| 14.   | Paper IX :<br>Digital Image Processing         | On the successful completion of the course, student will be able to: |  |       |
|   |  | 1  | Understand the fundamentals of Digital Image Processing  | K1,K2 |
|   |  | 2  | Understand the mathematical foundations for digital image representation, image acquisition, image transformation, and image enhancement | K2,K3 |
|   |  | 3  | Apply, Design and Implement and get solutions for digital image processing problems  | K3,K4 |
|   |  | 4  | Apply the concepts of filtering and segmentation for digital image retrieval   | K4,K5 |
|   |  | 5  | Explore the concepts of Multi-resolution process and recognize the objects in an efficient manner  | K5,K6 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |  |       |
| 15.   | Paper X: Cloud Computing                       | On the successful completion of the course, student will be able to: |  |       |
|   |  | 1  | Understand the concepts of Cloud and its services  | K1,K2 |
|   |  | 2  | Collaborate Cloud for Event & Project Management   | K3,K4 |
|   |  | 3  | Analyze on cloud in – Word Processing, Spread Sheets, Mail, Calendar, Database   | K4,K5 |
|   |  | 4  | Analyze cloud in social networks   | K5,K6 |
|   |  | 5  | Explore cloud storage and sharing  | K6    |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Creat</b>  |  |  |  |       |
| 16.   | Paper XI:<br>Network Security and Cryptography | On the successful completion of the course, student will be able to: |  |       |
|   |  | 1  | Understand the process of the cryptographic algorithms   | K1,K2 |
|   |  | 2  | Compare and apply different encryption and decryption techniques to solve problems related to confidentiality and authentication         | K2,K3 |
|   |  | 3  | Apply and analyze appropriate security techniques to solve network security problem  | K3,K4 |
|   |  | 4  | Exploresuitable cryptographic algorithms   | K4,K5 |
|   |  | 5  | Analyze different digital signature algorithms to achieve authentication and design secure applications                                  | K5,K6 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |  |       |
| 17.   | Paper XII : Data Science & Analytics           | On the successful completion of the course, student will be able to: |  |       |
|   |  | 1  | Understand the concept of data science and its techniques  | K1,K2 |
|   |  | 2  | Review data analytics  | K2,K3 |
|   |  | 3  | Apply and determine appropriate Data Mining techniques using R to real time applications   | K3,K4 |
|   |  | 4  | Analyze on clustering algorithms   | K4,K5 |
|   |  | 5  | Analyze on regression methods in AI  | K6    |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |  |       |

|   |   |   |  |  |
|---|---|---|--|--|
| 18.   | Elective – II:<br>Mobile Computing  | On the successful completion of the course, student will be able to:                        |  |  |
|   |   | 1   | Understand the need and requirements of mobile communication   | K1,K2  |
|   |   | 2   | Focus on mobile computing applications and techniques  | K2,K3  |
|   |   | 3   | Demonstrate satellite communication in mobile computing  | K4   |
|   |   | 4   | Analyze about wireless local loop architecture   | K5,K6  |
|   |   | 5   | Analyze various mobile communication technologies  | K6   |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |
| 19.   | Practical V:<br>Digital Image Processing Lab using MATLAB                             | On the successful completion of the course, student will be able to:                        |  |  |
|   |   | 1   | To write programs in MATLAB for image processing using the techniques  | K1,K2  |
|   |   | 2   | To able to implement Image Enhancements & Restoration techniques   | K2,K3  |
|   |   | 3   | Capable of using Compression techniques in an Image  | K3,K4  |
|   |   | 4   | Must be able to manipulate the image and Segment it  | K5,K6  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |
|   |   | 20.   | Practical VI :<br>Cloud Computing Lab  | On the successful completion of the course, student will be able to: |
| 1   | Understand the concepts of object oriented with respect to C++                        |   |  | K1,K2  |
| 2   | Able to understand and implement OOPS concepts  |   |  | K3,K4  |
| 3   | Implementation of data structures like Stack, Queue, Tree , List using C++            |   |  | K4,K5  |
| 4   | Application of the data structures for Sorting, Searching using different techniques. |   |  | K5,K6  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |   |  |  |
| 21.   | Practical VII :<br>Web Application development & hosting                              |   |  | On the successful completion of the course, student will be able to: |
|   |   | 1   | Understand & implement the basic HTML tags to create static web pages  | K1,K2  |
|   |   | 2   | Capable of using hyperlinks, frames , images, tables, ....in a web page  | K2,K3  |
|   |   | 3   | Able to write dynamic web applications using HTML forms  | K4,K5  |
|   |   | 4   | Must be able to write dynamic web applications in PHP & HTML tags using XAMPP.                                   | K5,K6  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |  |
|   |   | <b>Semester IV</b>  |  |  |
| 22.   | Project work and Viva - voce  | On the successful completion of the course, student will be able to:                        |  |  |
|   |   | 1   | Formulate real-world problem and its specifications and to create a design solution for a set of specifications. | <b>K3</b>  |
|   |   | 2   | Test and confirm the developed prototype's adherence to the problem's original requirements.                     | <b>K5</b>  |
|   |   | 3   | Work as a member of a team producing software solutions as a responsible member and maybe a leader.              | <b>K3</b>  |

|  |  |   |  |                   |
|--|--|---|--|-------------------|
|  |  | 4 | Write down technological concepts, strategies, and procedures. Self-teach new tools, algorithms, and procedures that will help with the project's software solution. | <b>K1-<br/>K4</b> |
|  |  | 5 | Alternative solutions should be generated, compared, and the best one chosen.  | <b>K6</b>         |
| <b>K1</b> – Remember; <b>K2</b> – Understand; <b>K3</b> – Apply; <b>K4</b> – Analyze; <b>K5</b> – Evaluate; <b>K6</b> – Create |  |   |  |                   |

**Providence College for Women (Autonomous),Coonoor**

**Part 1 – Tamil Language**

**For all BA/ B.Sc/B.Com/BCA Courses**

**(For the Students admitted during 2021-2022 onwards- towards Outcome Based Education)**

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**Program Specific Outcomes**

1. To develop the ability to understand and communicate (Read, write, speak and understand).
2. To enable student to be employable in Tamil Domains.

**Program Outcomes**

1. To familiarize the students with the adequate knowledge of Tamil Language, Civilization and culture.
2. To develop the skill of translation.



**PROVIDENCE COLLEGE FOR WOMEN**

**(Autonomous)**

**Re-Accredited by NAAC as 'A' Grade**

**Springfield, Coonoor – 643104, The Nilgiris**

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## **PART – 1 HINDI**

### **FIRST SEMESTER**

#### **COURSE OBJECTIVE:**

- Improves grammatical knowledge
- Will continue to read and learn about articles and think about them
- It is possible to read and understand short stories and understand the thoughts and life of the people of this state
- Translation knowledge and the ability to read and analyze a message are also available

### **SECOND SEMESTER**

#### **COURSE OBJECTIVE:**

- A basic understanding of contemporary poetry can be gained and the nature of modern poetry can be realized.
- Realizing the nature of drama and its nature and improving the knowledge of reading and understanding the nature of contemporary plays.
- Understands the benefits of correspondence and can enhance the correspondence you need.
- Translation is especially useful for translating from Hindi to English

### **THIRD SEMESTER**

#### **COURSE OBJECTIVE:**

- May have knowledge of the contents of primitive poetry.
- Learn about contemporary poetry and its techniques.
- Interest in reading poetry and the ability to express social thoughts will improve.
- This will help to understand the basics of Hindi Literature and to understand Hindi Literature properly.
- Knowledge of the elements of poetry and the knowledge of translation will improve.

## **FOURTH SEMESTER**

### **COURSE OBJECTIVE:**

- Knowledge of contemporary drama contents of Hindi literature
- Learn novels and its techniques. The ability to read novels and express criticism about it and the ability to express social thoughts will improve
- There will also be litigation messages in Hindi and news on speech techniques
- Able to write articles on their own and improve their sophisticated translation skills.

**Providence College for Women (Autonomous), Coonoor**

**Part I – French Language**

**For all BA/B.Sc./B.Com/ BCA courses**

**(For the students admitted during 2021-2022 onwards - towards**

**Outcome Based Education and Industry 4.0)**

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**Program Specific Outcomes**

1. To develop the ability to understand and communicate (read, write, speak and understand) in intermediary level of French.
2. To enable student to be employable in French domains

**Program Outcomes**

1. To familiarize the student with the basic knowledge of French language, civilization and culture
2. To demonstrate a marked ability to communicate in the target language – French

**PROVIDENCE COLLEGE FOR WOMEN**  
**DEPARTMENT OF MATHEMATICS**

B.Sc Mathematics 2022-2023

| <b>Program Specific Outcomes (PSOs)</b>  |  |
|--|--|
| After the successful completion of <b>B. Sc. Mathematics</b> program, the students are expected to |  |
| PSO1   | Maintain a core of mathematical and technical knowledge that is adaptable to changing technologies and provide a solid foundation for extended learning.       |
| PSO2   | Identify the applications of Mathematics in other disciplines and society.   |
| PSO3   | Develop an in-depth knowledge in Mathematics appreciating the connections between theory and its applications.   |
| PSO4   | Demonstrate their mathematical modeling ability, problem solving skills, creative talent and power of communication necessary for various kinds of employment. |
| PSO5   | Develop mathematical aptitude and the ability to think abstractly.   |
| PSO6   | Learn independently and improve one's performance.   |
| PSO7   | Students are equipped to appear competitive examinations.  |

| <b>Program Outcomes (POs)</b>                                     |   |
|---|---|
| On successful completion of the <b>B. Sc. Mathematics</b> program |   |
| PO1   | Students are empowered with analytical and logical skills-to formulate results and construct mathematical argument.   |
| PO2   | Ability to organize, analyze and interpret data accurately in both academic and non -academic context.  |
| PO3   | Demonstrate effective communication of mathematical ideas and creative thinking skills to facilitate solving real world problems as a team and independently. |
| PO4   | Appreciate and identify the connections between Mathematics and other disciplines.  |
| PO5   | Competency to obtain employment in education, public and private sectors.   |
| PO6   | Identify the area of interest for extended learning from the understanding gained from the domain and allied areas of Mathematics.                            |
| PO7   | Develop mathematical aptitude and make critical observations.   |
| PO8   | Enrich them with innovative ideas to face global challenges.  |
| PO9   | Instill a sense of responsibility in tackling professional and social issues ethically.   |
| PO10  | Trigger their passion for research in unexplored areas of Mathematics.  |



**B.Sc MATHEMATICS - Course outcome - 2021-2022**

| S.No  | Course  | Course Outcome  |   |    |  |
|---|---|---|---|----|--|
| 1   | Core 1 :<br>CLASSICAL<br>ALGEBRA                | Semester I  |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Know the concept of Binomial, Exponential, Logarithmic application to summation of series.                                    | K1 |  |
|   |   | CO2   | Acquire a clear knowledge regarding methods to find an  | K2 |  |
|   |   | CO3   | Apply the appropriate tests to find the convergence or  | K3 |  |
|   |   | CO4   | Apply Descartes's rule of signs to find the number of   | K3 |  |
|   |   | CO5   | Analyze the relation between roots and coefficients of the  | K4 |  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |   |   |   |    |  |
| 2   | Core 2 :<br>CALCULUS                            | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Identify areas in Mathematics and other fields where  | K1 |  |
|   |   | CO2   | Understand the concepts of Evolutes and Envelopes, curvature and evolutes.  | K2 |  |
|   |   | CO3   | Apply the concept of change of variables in double and  | K3 |  |
|   |   | CO4   | Apply double, triple integral to find the area and volume   | K3 |  |
|   |   | CO5   | Apply the Beta and gamma function to solve the multiple   | K4 |  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |    |  |
| 3   | Core 3 :<br>ALLIED<br>PHYSICS I                 | Semester I  |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | 1   | Understand and define the laws involved in gravitation and  | K2 |  |
|   |   | 2   | Develop the knowledge about heat and thermodynamics, sound  | K3 |  |
|   |   | 3   | Understand the concept of properties of matter and to recognize their applications in various real problems.                  | K4 |  |
|   |   | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyse; K5 - Evaluate; K6 - Create</b> |   |    |  |
|   |   | K4  |   |    |  |
| 4   | Core 4 :<br>ANALYTICAL<br>GEOMETRY              | Semester II   |   |    |  |
|   |   | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Gain knowledge about the regular geometrical figures and properties.  | K1 |  |
|   |   | CO2   | Describe the geometric concepts.  | K2 |  |
|   |   | CO3   | Find equation to tangent, normal at a point on a conic  | K3 |  |
|   |   | CO4   | Analyze condition of tangency and find the tangent plane to   | K4 |  |
|   |   | CO5   | Analyze conics to explain natural phenomenon  | K4 |  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |   |   |   |    |  |
| 5   | Core 5 :<br>TRIGONOMETRY,<br>VECTOR<br>CALCULUS | On the successful completion of the course, student will be able to:                        |   |    |  |
|   |   | CO1   | Know the expansion of trigonometric functions and   | K1 |  |
|   |   | CO2   | Acquire the basic knowledge of vector differentiation and   | K2 |  |
|   |   | CO3   | Determine and apply the important quantities associated with vector fields such as the divergence, curl and scalar potential. | K3 |  |

|   |  |   |   |           |  |
|---|--|---|---|-----------|--|
|   | CALCULUS AND FOURIER SERIES                            | CO4   | Understand and find Fourier series of a given periodic  | K3        |  |
|   |  | CO5   | Examine line integral, surface integral, volume integral and inter-relations among them .                                     | K4        |  |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |           |  |
| 6   | Core 6 : ALLIED PHYSICS II                             | On the successful completion of the course, student will be able to:                        |   |           |  |
|   |  | 1   | Acquire knowledge on basic concepts of photoelectric effect and fission, fusion and to get clear idea on wave mechanics.      | K1        |  |
|   |  | 2   | Understand the features of Nuclear forces, photoelectric cells, semiconductor diodes, and their fundamental concepts.         | K2        |  |
|   |  | 3   | Understand the concept of Laser properties, digital electronics and to recognize their applications in real life.             | K4        |  |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |   |           |  |
| 7   | Core 7 : ALLIED PHYSICS - LAB                          | On the successful completion of the course, student will be able to:                        |   |           |  |
|   |  | 1   | attain skill to understand the usage of basic laws and properties of the materials given.                                     | K3        |  |
|   |  | 2   | analyze the characteristics of various diodes and construct   | K4        |  |
|   |  | 3   | acquire the knowledge of the potentiometer and apply it for   | K5        |  |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 -</b>        |   |           |  |
| 8   | Core 8 : DIFFERENTIAL EQUATIONS AND LAPLACE TRANSFORMS | <b>Semester III</b>   |   |           |  |
|   |  | On the successful completion of the course, student will be able to:                        |   |           |  |
|   |  | CO1   | Acquire knowledge to solve Differential and Partial   | K1        |  |
|   |  | CO2   | Solve higher order linear differential equations.   | K2        |  |
|   |  | CO3   | Expose differential equation as a powerful tool in solving problems in Physical and Social sciences.                          | K3        |  |
|   |  | CO4   | Demonstrate competency to solve linear PDE by   | K3        |  |
|   |  | CO5   | Analyze the concepts of Laplace transforms and inverse solve ODE with constant coefficients.                                  | K4        |  |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |   |   |           |  |
| 9   | Core 9 : STATICS                                       | On the successful completion of the course, student will be able to:                        |   |           |  |
|   |  | CO1   | Remember the various laws.  | K1        |  |
|   |  | CO2   | Understand the concepts of forces and moments.  | K2        |  |
|   |  | CO3   | Understand the concepts of equilibrium.   | K2        |  |
|   |  | CO 4  | Apply the concepts of forces and moments.   | K3        |  |
|   |  | CO 5  | Analyze the basics of coplanar forces, equilibrium of forces acting on a rigid body and solve the problems.                   | K4        |  |
|   |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |   |           |  |
|   | Core 10 : ALLIED                                       | On the successful completion of the course, student will be able to:                        |   |           |  |
|   |  | 1   | Understand the properties metals and their conductivity, the synthesis and applications of boron compounds.                   | K1-K4     |  |
|   |  | 2   | Understand about silicones fuels gases and their industrial The theory behind colours and dyes, their preparation and dyeing. | K2-K4, K6 |  |

|  |                                |  |   |       |  |
|--|--------------------------------|--|---|-------|--|
| 10   | ALLIED CHEMISTRY I             | 3  | Understand the bonding and structure of various hydrocarbons and electronic effects. Appreciate the optical properties of the compounds nature itself | K1-K4 |  |
|  |                                | 4  | Explain the chemistry behind toiletries and cleaning agents.  | K2-K5 |  |
|  |                                | 5  | Understand the kinetics behind chemical reactions and the nature  | K1-K3 |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |   |       |  |
| 11   | Core 11: OPERATIONS RESEARCH I | CO 1   | Understand the basic concepts and application of fields.  | K1    |  |
|  |                                | CO 2   | Know principles of construction of mathematical models of   | K2    |  |
|  |                                | CO 3   | Analyze the relationship between a linear program and its   | K3    |  |
|  |                                | CO 4   | Apply techniques constructively to make effective problems in industry.   | K3    |  |
|  |                                | CO 5   | Build and solve transportation problems.  | K4    |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;             |   |       |  |
| 12   | Core 12: DYNAMICS              | <b>SEMESTER IV</b>   |   |       |  |
|  |                                | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | CO 1   | Remember the basic kinematics and dynamic concepts.   | K1    |  |
|  |                                | CO 2   | Describe the differential equation of Central Orbits .  | K2    |  |
|  |                                | CO 3   | Apply the concepts of projectiles to solve problems relating to the motion of a projectile.   | K3    |  |
|  |                                | CO 4   | To understand & apply the concepts of composition of simple harmonic motion in two directions.  | K3    |  |
|  |                                | CO 5   | Understand impulsive forces and analyze loss of K.E due to impact.  | K4    |  |
| K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; |                                |  |   |       |  |
| 13   | Core 13: PROGRAMMING IN C      | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | CO 1   | Remember the importance of C language and datatypes.  | K1    |  |
|  |                                | CO 2   | Understand the basic structure, operators and statements of   | K2    |  |
|  |                                | CO 3   | Understand decision control statements, loop control  | K2    |  |
|  |                                | CO 4   | Apply the concepts of data types, operators, expressions, control statements, arrays, character arrays and strings to                                 | K3    |  |
|  |                                | CO 5   | Read, understand and trace the execution of programs written  | K4    |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;             |   |       |  |
| 14   | Core 14: ALLIED CHEMISTRY II   | On the successful completion of the course, student will be able to:                 |   |       |  |
|  |                                | 1  | Appreciate the role of metals in biological system and their  | K1-K3 |  |
|  |                                | 2  | Understand about the importance of paints and the need for the bad face of war.   | K2-K5 |  |
|  |                                | 3  | Understand the importance of polymers and rubbers in our day to   | K1-K4 |  |
|  |                                | 4  | Appreciate the need for fertilizers and insecticides in the   | K2-K5 |  |
|  |                                | 5  | Understand the importance of electrochemistry and energy  | K2-K4 |  |
|  |                                | K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create |   |       |  |

|    |  |   |  |       |
|----|--|---|--|-------|
| 15 | Core 15:<br>ALLIED<br>CHEMISTRY -- LAB           | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | 1   | Estimate the amount of ion present in the given solution through volumetric analysis                           | K1-K6 |
|    |  | 2   | Find the groups/elements and characters present in the given substance through qualitative analysis            | K1-K6 |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b> |  |       |
| 16 | Core 16:<br>OPERATIONS<br>RESEARCH<br>- PAPER II | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Identify the importance of stocks, the reasons for holding determine the optimal order quantity for models .   | K1    |
|    |  | CO 2  | Explain the various costs related to inventory system.   | K2    |
|    |  | CO 3  | Apply game theory concepts to articulate real-world analyzing and practicing strategic decisions .             | K3    |
|    |  | CO 4  | Apply and extend queueing models to analyze real world   | K4    |
|    |  | CO 5  | Build and solve assignment model.  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
| 17 | Core 17:<br>REAL<br>ANALYSIS<br>I                | <b>SEMESTER V</b>   |  |       |
|    |  | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Remember the basic topological properties of subsets of the  | K1    |
|    |  | CO 2  | Understand the fundamental properties of the real numbers and analyze the real number system.                  | K2    |
|    |  | CO 3  | Learn the concept of limits, sequence, continuity, convergent sequence in metric spaces appreciating the       | K2    |
|    |  | CO 4  | Have the proficiency in the formulation and construction of proofs of basic results in real analysis.          | K3    |
|    |  | CO 5  | Demonstrate skills in communicating Mathematics and learn basic techniques and examples in analysis to be well | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
|    |  |   |  |       |
| 18 | Core 18:<br>COMPLEX<br>ANALYSIS<br>I             | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO1   | Learn techniques of complex analysis effectively to  | K1    |
|    |  | CO 2  | Recognize the simple and multiple connected domains.   | K2    |
|    |  | CO 3  | Investigate a function for its analyticity and find it series  | K3    |
|    |  | CO 4  | Examine the relationship between conformal mapping and   | K4    |
|    |  | CO 5  | Compute contour integrals directly and by the fundamental  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |
|    |  |   |  |       |
| 19 | Core 19:<br>MODERN<br>ALGEBRA -<br>I             | On the successful completion of the course, student will be able to:                        |  |       |
|    |  | CO 1  | Recall the properties and extend group structure to finite   | K1    |
|    |  | CO 2  | Explain the concepts of homomorphism, isomorphism and  | K2    |
|    |  | CO 3  | Demonstrate abstract thinking capacity and ability to prove  | K3    |
|    |  | CO 4  | Compare features of different algebraic structures.  | K4    |
|    |  | CO 5  | Examine the properties of algebraic structures and their role  | K4    |
|    |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>             |  |       |

|      |   |   |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
|------|---|---|------|---|----|------|--|----|------|---|----|------|--|----|------|---|----|--|
|      |   |   |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| 20   | Core 20:<br>DISCRETE<br>MATHEMATICS   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tbody> <tr> <td>CO 1</td> <td>Assimilate various graph theoretic concepts and familiarize with their applications.</td> <td>K1</td> </tr> <tr> <td>CO 2</td> <td>Know and understand about partially ordered sets, Boolean algebra, lattices and their types.</td> <td>K2</td> </tr> <tr> <td>CO 3</td> <td>Apply Karnaugh map for simplifying the Boolean</td> <td>K3</td> </tr> <tr> <td>CO 4</td> <td>Demonstrate the skill to construct simple mathematical</td> <td>K4</td> </tr> <tr> <td>CO 5</td> <td>To achieve greater accuracy, clarity of thought and</td> <td>K4</td> </tr> </tbody> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b></p>   | CO 1 | Assimilate various graph theoretic concepts and familiarize with their applications.                          | K1 | CO 2 | Know and understand about partially ordered sets, Boolean algebra, lattices and their types. | K2 | CO 3 | Apply Karnaugh map for simplifying the Boolean  | K3 | CO 4 | Demonstrate the skill to construct simple mathematical   | K4 | CO 5 | To achieve greater accuracy, clarity of thought and   | K4 |  |
| CO 1 | Assimilate various graph theoretic concepts and familiarize with their applications.                          | K1  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 2 | Know and understand about partially ordered sets, Boolean algebra, lattices and their types.                  | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 3 | Apply Karnaugh map for simplifying the Boolean  | K3  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 4 | Demonstrate the skill to construct simple mathematical  | K4  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 5 | To achieve greater accuracy, clarity of thought and   | K4  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| 21   | Core 21:<br>OPERATIONS<br>RESEARCH<br>– PAPER III   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tbody> <tr> <td>CO 1</td> <td>Know the concept of simulation and simulate a queueing</td> <td>K1</td> </tr> <tr> <td>CO 2</td> <td>Understand the overall approach of dynamic programming.</td> <td>K2</td> </tr> <tr> <td>CO 3</td> <td>Solve nonlinear programming problems using Lagrange Kuhn-Tucker conditions.</td> <td>K2</td> </tr> <tr> <td>CO 4</td> <td>Apply concepts in optimal scheduling</td> <td>K3</td> </tr> <tr> <td>CO 5</td> <td>To formulate a model for solving the intractable problems.</td> <td>K4</td> </tr> </tbody> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b></p>  | CO 1 | Know the concept of simulation and simulate a queueing  | K1 | CO 2 | Understand the overall approach of dynamic programming.                                      | K2 | CO 3 | Solve nonlinear programming problems using Lagrange Kuhn-Tucker conditions.                               | K2 | CO 4 | Apply concepts in optimal scheduling   | K3 | CO 5 | To formulate a model for solving the intractable problems.  | K4 |  |
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| CO 2 | Understand the overall approach of dynamic programming.   | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 3 | Solve nonlinear programming problems using Lagrange Kuhn-Tucker conditions.                                   | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 4 | Apply concepts in optimal scheduling  | K3  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 5 | To formulate a model for solving the intractable problems.  | K4  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| 22   | Core 22<br>REAL<br>ANALYSIS<br>II   | <p style="text-align: center;"><b>SEMESTER VI</b></p> <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tbody> <tr> <td>CO 1</td> <td><b>Demonstrate the understanding of continuity, uniform continuity, compactness, connectedness.</b></td> <td>K1</td> </tr> <tr> <td>CO2</td> <td><b>Understand partitions and their refinement.</b></td> <td>K2</td> </tr> <tr> <td>CO 3</td> <td><b>Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function.</b></td> <td>K2</td> </tr> <tr> <td>CO 4</td> <td><b>Examine the derivatives of function.</b></td> <td>K3</td> </tr> <tr> <td>CO 5</td> <td><b>Acquire skills in writing and analyze the proofs that arise in the context of real analysis.</b></td> <td>K4</td> </tr> </tbody> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 - Create</b></p> | CO 1 | <b>Demonstrate the understanding of continuity, uniform continuity, compactness, connectedness.</b>           | K1 | CO2  | <b>Understand partitions and their refinement.</b>   | K2 | CO 3 | <b>Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function.</b> | K2 | CO 4 | <b>Examine the derivatives of function.</b>  | K3 | CO 5 | <b>Acquire skills in writing and analyze the proofs that arise in the context of real analysis.</b> | K4 |  |
| CO 1 | <b>Demonstrate the understanding of continuity, uniform continuity, compactness, connectedness.</b>           | K1  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO2  | <b>Understand partitions and their refinement.</b>  | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 3 | <b>Determine the Riemann integrability and the Riemann-Stieltjes integrability of a bounded function.</b>     | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 4 | <b>Examine the derivatives of function.</b>   | K3  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 5 | <b>Acquire skills in writing and analyze the proofs that arise in the context of real analysis.</b>           | K4  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| 23   | Core 23:<br>COMPLEX<br>ANALYSIS<br>II   | <p>On the successful completion of the course, student will be able to:</p> <table border="1"> <tbody> <tr> <td>CO 1</td> <td>To recognize and apply the Liouville's theorem, the mean-value property of a function and the maximum modulus</td> <td>K1</td> </tr> <tr> <td>CO 2</td> <td>Demonstrate understanding and appreciation of deeper aspects of complex analysis.</td> <td>K2</td> </tr> <tr> <td>CO 3</td> <td>Apply residue theorem to compute integrals.</td> <td>K3</td> </tr> <tr> <td>CO 4</td> <td>Ability to think critically by proving mathematical conjectures and establishing theorems from complex</td> <td>K4</td> </tr> <tr> <td>CO 5</td> <td>Classify the nature of singularity, poles and residues .</td> <td>K2</td> </tr> </tbody> </table> <p><b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b></p>   | CO 1 | To recognize and apply the Liouville's theorem, the mean-value property of a function and the maximum modulus | K1 | CO 2 | Demonstrate understanding and appreciation of deeper aspects of complex analysis.            | K2 | CO 3 | Apply residue theorem to compute integrals.   | K3 | CO 4 | Ability to think critically by proving mathematical conjectures and establishing theorems from complex | K4 | CO 5 | Classify the nature of singularity, poles and residues .  | K2 |  |
| CO 1 | To recognize and apply the Liouville's theorem, the mean-value property of a function and the maximum modulus | K1  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 2 | Demonstrate understanding and appreciation of deeper aspects of complex analysis.                             | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 3 | Apply residue theorem to compute integrals.   | K3  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 4 | Ability to think critically by proving mathematical conjectures and establishing theorems from complex        | K4  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |
| CO 5 | Classify the nature of singularity, poles and residues .  | K2  |      |   |    |      |  |    |      |   |    |      |  |    |      |   |    |  |

|  |  |   |  |    |
|--|--|---|--|----|
| 24   | Core 24:<br>MODERN<br>ALGEBRA -<br>II            | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Communicate and understand mathematical ideas and  | K1 |
|  |  | CO 2  | Explain the concepts of base and dimension of Vector   | K2 |
|  |  | CO 3  | To apply the Gram-Schmidt process to construct an orthonormal set of vectors in an inner product space.      | K3 |
|  |  | CO 4  | Demonstrate competence with the basic ideas of Matrix Dual spaces, Linear transformation.                    | K3 |
|  |  | CO 5  | Have an insight to analyze a real life problem and solve it.   | K4 |
|  |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |    |
| 25   | Core 25<br>OPERATIONS<br>RESEARCH<br>- PAPER -IV | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Know the principles and applications of information theory.  | K1 |
|  |  | CO 2  | To understand sequencing, replacement problems.  | K2 |
|  |  | CO 3  | Demonstrate skills to achieve their objective using  | K3 |
|  |  | CO 4  | Apply decision making under different business   | K4 |
|  |  | CO 5  | Determine a solution to a rectangular game using simplex   | K3 |
|  |  | <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |  |    |
| 26   | Elective 1:<br>NUMERICAL<br>METHODS -<br>I       | <b>Elective</b>   |  |    |
|  |  | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Remember the concepts of errors and its effect on  | K1 |
|  |  | CO 2  | Obtain numerical solutions of algebraic and transcendental   | K2 |
|  |  | CO 3  | Apply the finite difference and interpolation concepts.  | K3 |
|  |  | CO 4  | Develop skills in designing mathematical models for constructing polynomials to the given data and drawing   | K4 |
|  |  | CO 5  | Analyze the efficiency of iteration methods.   | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b>      |  |   |  |    |
| 27   | Elective 2:<br>Numerical<br>Methods II           | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Familiarize with numerical integration and differentiation, ordinary differential equations.                 | K1 |
|  |  | CO 2  | Distinguish methods of Taylor series, Euler's, Modified methods to find solutions of differential equations. | K2 |
|  |  | CO 3  | Apply the techniques for enormous application in the fields of Engineering.                                  | K3 |
|  |  | CO 4  | Compute the integrals and derivatives by using the   | K4 |
|  |  | CO 5  | Find the numerical solution of second order O.D.E by   | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate; K6 -</b> |  |   |  |    |
| 28   | Elective 3<br>PROGRAMMING IN<br>C++              | On the successful completion of the course, student will be able to:            |  |    |
|  |  | CO 1  | Know about class structure, member functions & data and example problems .                                   | K1 |
|  |  | CO 2  | Understand how C++ improves C with object-oriented   | K2 |
|  |  | CO 3  | Develop programming skills.  | K2 |

|   |      |   |    |
|---|------|---|----|
|   | CO 4 | To make use of objects and classes for developing | K3 |
|   | CO 5 | Build C++ classes.                                | K4 |
| <b>K1 - Remember; K2 - Understand; K3 - Apply; K4 - Analyze; K5 - Evaluate;</b> |      |   |    |

**PROVIDENCE COLLEGE FOR WOMEN**  
**DEPARTMENT OF MATHEMATICS**  
M.Sc Mathematics 2022-2023

| <b>Program Specific Outcomes (PSOs)</b>  |  |
|--|--|
| After the successful completion of <b>M. Sc. Mathematics</b> program, the students are expected to |  |
| PSO1   | Communicate concepts of Mathematics and its applications.  |
| PSO2   | Acquire analytical and logical thinking through various mathematical tools and techniques.   |
| PSO3   | Investigate real life problems and learn to solve them through formulating mathematical models.  |
| PSO4   | Attain in-depth knowledge to pursue higher studies and ability to conduct research.<br>Work as mathematical professional.  |
| PSO5   | Achieve targets of successfully clearing various examinations/interviews for placements in teaching, banks, industries and various other organizations/services. |

| <b>Program Outcomes (POs)</b>  |   |
|--|---|
| On successful completion of the M. Sc. Mathematics program, the students will be able to |   |
| PO1  | Demonstrate in-depth knowledge of Mathematics, both in theory and application.  |
| PO2  | Attain the ability to identify, formulate and solve challenging problems in Mathematics.  |
| PO3  | Know the various specialized areas of advanced mathematics and its applications.  |
| PO4  | Analyze complex problems in Mathematics and propose solutions using research-based knowledge.   |
| PO5  | Obtain the accurate solutions for the community oriented problems via various mathematical models.  |
| PO6  | Work individually or as a team member or leader in uniform and multidisciplinary settings.  |
| PO7  | Crack lectureship and fellowship exams affirmed by UGC like CSIR-NET and SET.   |
| PO8  | Apply the Mathematical concepts, in all the fields of learning including higher research, and recognize the need and prepare for lifelong learning. |
| PO9  | Know the use of computers both as an aid and as a tool to study problems in Mathematics.  |
| PO10   | Inculcate the knowledge of formulation and apply the mathematical concepts which are suitable for real life applications.                           |



