| Class    | Semester | Name of Subject                              | Subject Code | CO No.     | CO Apply the concepts of algebra to solve engineering (discipline) related problems.   |
|----------|----------|--|--------------|------------|--|
|          |          |  |              | CO2        | Apply the concepts of algebra to solve engineering (discipline) related problems.  Utilize trigonometry to solve branch specific engineering problems. |
| FY       | 1        | BASIC MATHEMATICS                            | 311302       | CO3        | Solve area specific engineering problems under given conditions of straight lines.   |
|          |          |  |              | CO4        | Apply differential calculus to solve discipline specific problems.   |
|          |          |  |              | CO5        | Use techniques and methods of statistics to crack discipline specific problems.  Construct grammatically correct sentences in English                  |
|          |          |  |              | CO2        | Compose paragraphs and dialogues on given situations   |
| FY       | 1        | COMMUNICATION SKILLS (ENGLISH)               | 311303       | CO3        | Comprehend passages correctly.   |
|          |          |  |              | CO4        | Use contextual words in English appropriately  |
|          |          |  |              | CO5        | Deliver effective presentations in English using appropriate body language   |
|          |          |  |              | CO1        | Use basic instruments to measure the physical quantities in various engineering situations.  |
|          |          |  |              | CO2        | Apply the basic principles of electromagnetics to solve given engineering problems.  |
| FY       | 1        | BASIC SCIENCE                                | 311305       | CO3        | Apply basic principles of thermometry and fibre optics to solve engineering problems.  |
|          |          |  |              | CO4        | Predict the structure, properties and behaviour of molecules and compounds based on the types of   |
|          |          |  |              | CO5        | chemical bond.  Apply the concepts of electrochemistry and corrosion preventive measures in industry.  |
|          |          |  |              | CO6        | Use the appropriate engineering material and catalyst appropriately.   |
|          |          |  |              | CO1        | Use computer system and its peripherals for given purpose  |
|          |          |  |              | CO2        | Prepare Business document using Word Processing Tool   |
| FY       | 1        | FUNDAMENTALS OF ICT                          | 311001       | CO3        | Analyze Data and represent it graphically using Spreadsheet  |
|          |          |  |              | CO5        | Prepare professional Slide Show presentations Use different types of Web Browsers and Apps   |
|          |          |  |              | CO6        | Explain concept and applications of Emerging Technologies  |
|          |          | ENGINEERING WORKSHOP PRACTICE                |              | CO1        | Carry-out elementary level maintenance of a PC   |
|          | 1        |  |              | CO2        | Create partitions and format hard disk drive   |
| FY       |          |  | 311002       | CO3        | Install and configure Operating system.  Configure different types of peripheral devices.  |
|          |          |  |              | CO5        | Setup small Local Area Network.  |
|          |          |  |              | CO6        | Use diagnostic software for fault finding in Computer system.  |
|          |          |  |              | CO1        | Practice basic Yoga and Pranayama in daily life to maintain physical and mental fitness.   |
| FY       | 1        | YOGA AND MEDITATION                          | 311003       | CO2        | Practice meditation regularly for improving concentration and better handling of stress and anxiety.   |
|          |          |  |              | CO3        |  |
|          |          |  | +            | CO1        | Follow healthy diet and hygienic practices for maintaining good health.  Draw geometrical figures and engineering curves.                              |
|          |          |  |              | CO2        | Apply principles of orthographic projections for drawing given pictorial views.  |
| FY       | 1        | ENGINEERING GRAPHICS                         | 311008       | CO3        | Apply basic CAD commands for drawing different entities  |
|          | 1        |  |              | CO4        | Use various drawing codes, conventions and symbols as per IS SP-46 in engineering drawing.   |
|          |          |  |              |            |  |
|          |          |  |              | CO5        | Draw free hand sketches of given engineering elements  Solve the broad-based engineering problems of integration using suitable methods                |
|          | 2        | APPLIED MATHEMATICS                          |              | CO2        | Use definite integration to solve given engineering related problems.  |
| FY       |          |  | 312301       | CO3        | Apply the concept of differential equation to find the solutions of given engineering problems   |
|          | -        |  | 312301       |            |  |
|          |          |  |              | CO4<br>CO5 | Employ numerical methods to solve programme specific problems.   |
|          |          |  |              | CO1        | Use probability distributions to solve elementary engineering problems.  Calculate and measure basic electrical quantities and parameters              |
|          | 2        | BASIC ELECTRICAL AND ELECTRONICS ENGINEERING | 312302       | CO2        | Use different electrical machines by making connections.   |
| FY       |          |  |              | CO3        | Use electrical safety devices in electrical circuit  |
|          |          |  |              | CO4        | Use relevant diode in different electronic circuits.   |
|          |          |  |              | CO5<br>CO6 | Use BJT and FET in various electronic circuits Use various types of sensors and transducers.   |
|          | 2        | PROGRAMMING IN C                             |              | CO1        | Develop C program using input - output functions and arithmetic expressions  |
|          |          |  | 312303       | CO2        | Develop C program involving branching and looping statements   |
| FY       |          |  |              | CO3        | Implement Arrays and structures using C programs   |
|          |          |  |              | CO4        | Develop C program using user-defined functions   |
|          |          |  |              | CO5        | Write C program using pointer Install Linux operating system   |
|          | 2        | LINUX BASICS                                 | 312001       | CO2        | Execute general purpose commands of the Linux operating system.  |
| FY       |          |  |              | CO3        | Manage files and directories in Linux operating system.  |
|          |          |  |              | CO4        | Use vi editor in Linux operating system.   |
| $\vdash$ |          |  | 1            | CO5        | Write programs using shell script.   |
|          |          | PROFESSIONAL COMMUNICATION                   | 312002       | CO1        | Communicate effectively (oral / spoken and Written) in various formal and informal situations minimizing the barriers.                                 |
|          | 2        |  |              | CO2        | Develop listening skills through active listening and note taking.   |
| FY       |          |  |              | CO3        | Write circulars, notices and minutes of the meeting.   |
|          |          |  |              | CO4        | Draft inquiry letter, complaint letter, Job application with resume / CV, Compose effective E - mails  |
|          |          |  |              | CO5        | Write Industrial reports   |
|          |          |  |              |            | Enhance the ability to be fully self-aware and take challenges by overcoming all fears and insecurities  |
|          | 2        | SOCIAL AND LIFE SKILLS                       |              | CO1        | and grow fully.  |
|          |          |  |              | CO2        | Increase self-knowledge and awareness of emotional skills and emotional intelligence at the place of   |
| FY       |          |  | 312003       | <u> </u>   | study/work.  |
| FY       |          |  | 312003       | CO3        | Provide the opportunity to realizing self-potential through practical experience while working individually or in group.                               |
|          |          |  |              |            | Develop interpersonal skills and adopt good leadership behaviour for self-empowerment and  |
|          |          |  |              | CO4        | empowerment of others.   |
|          |          |  |              | CO5        | Set appropriate life goals with managing stress and time effectively.  |
|          | 2        | WEB PAGE DESIGNING                           | 312004       | CO1        | Use HTML formatting tags to present content on web page.   |
|          |          |  |              | CO2<br>CO3 | Develop web page using list and hyperlinks.  Develop web pages using images, colors and backgrounds.   |
| FY       |          |  |              | CO4        | Design HTML forms using table and frames.  |
|          |          |  |              | CO5        | Apply presentation schemes on content using CSS.   |
|          |          |  |              | CO6        | Publish websites on internet or intranet.  |
|          | 3        | DATABASE MANAGEMENT SYSTEM                   | 313302       | CO1        | Explain concept of database management system.   |
| SY       |          |  |              | CO2        | Design the database for given problem.   |
|          |          |  |              | CO3        | Manage database using SQL.   |
| 31       |          |  |              | CO5        | Implement PL/SQL codes for given application.  Apply security and backup methods on database   |
| 31       | I        |  |              |            | p. pp., colonia, and backap membas on accepase   |
| 31       |          |  |              | CO1        | Apply number system and codes concept to interprete working of digital systems.  |
|          |          |  |              | CO2        | Apply number system and codes concept to interprete working of digital systems.  Apply Boolean laws to minimize complex Boolean function.              |
| SY       | 3        | DIGITAL TECHNIQUES                           | 313303       |            |  |

| SY 3 DATA STRUCTURE USING PYTHON 313306  SY 3 STATISTICAL MODELLING FOR MACHINE LEARNING 213307  SY 3 STATISTICAL MODELLING FOR MACHINE LEARNING 213307  SY 3 DATA STORY TELLING AND VISUALIZATION 213002  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABULTY 21401  SY 4 DATA COMMUNICATION AND SUSTAINABULTY 21401  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 214322  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 214322  SY 4 MATHEMATICS FOR MACHINE LEARNING 214322  SY 4 MATHEMATICS FOR MACHINE LEARNING 214322  SY 4 MACHINE MACHINE LEARNING 214321  SY 4 MACHINE MACHINE MACHINE MACHINE LEARNING 214321  SY 4 MACHINE MACHINE MACHINE LEARNING 214321  SY 4 MACHINE MACHINE MACHINE LEARNING 214321  SY 5 MACHINE MACHINE MACHINE LEARNING 214321  SY 6 MACHINE MACHINE MACHINE MACHINE MACHINE MACHINE MACHINE | 1 1 |   | I  | I      | CO5 | Interpret the functions of data converters and memories in digital electronic systems. |
|--|-----|---|--|--------|-----|--|
| SY 3 DATA STRUCTURE USING PYTHON 313306  The provided of the provided provi | -   |   |  |        |     |  |
| SY 3 DATA STRUCTURE USING PYTHON 313006  CO3 Implement Modelles, Packages in Python for given problem.  CO5 Implement Linear Data Structure in Python.  CO6 Implement Linear Data Structure in Python.  CO6 Implement Linear Data Structure in Python.  CO7 Implement Linear Data Structure in Python.  CO8 Develop Python opgrant to implement the data structure.  CO8 Joshve the given problem used on Statistic Techniques using R-Programming.  CO8 Joshve the given problem used on Statistic Techniques using R-Programming.  CO8 Joshve the given problem used on Statistic Techniques using R-Programming.  CO8 Joshve the given problem used on Statistic Techniques using R-Programming.  CO9 Joshve the given problem used in the Implemental proplement.  CO9 Joshve the given problem used in the Implemental proplement.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given problem used in the Implemental problem.  CO9 Joshve the given incident.  CO9 Joshve the given incident. |     |   |  |        |     |  |
| SY 4 DATA STRUCTURE USING PYTHON 431-309 CO.4 Design classes for given problem.  CO.6 Develop Python program to implement tree data structure.  CO.6 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree data structure.  CO.7 Develop Python program to implement tree for the country.  CO.7 Develop Python program to implement tree for the country.  CO.7 Develop Python program to implement tree for the country.  CO.7 Develop Python program to implement the constitution.  CO.7 Develop Python program to implement the programming.  CO.7 Develop Python program to implement the great python program to implement the programming data to be used.  CO.7 Develop Python program to implement the programming the tree data structure.  CO.7 Develop Python program to implement the good prog |     |   |  |        |     | 1 /  |
| SY 4 PATA STORY TELLING AND VISUALIZATION 313007  SY 4 PALA STORY TELLING AND VISUALIZATION 313007  SY 4 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 5 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 6 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 7 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 6 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 6 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 6 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 7 PALA STORY TELLING AND SUSTAINABILITY 314318  SY 6 PAL | SY  | 3 | DATA STRUCTURE USING PYTHON                | 313306 | _   |  |
| SY 3 STATISTICAL MODELLING FOR MACHINE LEARNING STATISTICAL MODELLIN |     |   |  |        |     |  |
| SY 4 INVESTIGATION AND SUSTAINABILITY  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MACROPROCESSOR PROGRAMMING  SY 5 MACROPROCESSOR PROGRAMMING  SY 6 MACROPROCESSOR PROGRAMMING  SY 7 MACROPROCESSOR PROGRAMMING  SY 7 MACROPROCESSOR PROGRAMMING  SY 7 MACROPROCESSOR PROGRAMMING  SY 7 MACROPROCESSOR PROGRAMMING  SY 8 MACROPROCESSOR PROGRAMMING  SY 9 MACROPROCESSOR PRO |     |   |  |        |     |  |
| SY 3 STATISTICAL MODELING FOR MACHINE LEARNING 213307 CO2 Implement Statistic methods using R-Programming.  CO3 Use Promises of Problems using R-Programming.  CO4 Implement appropriate method based on the Interpolation.  Implement appropriate method based on the Interpolation.  Apply Sampling Methods to septe problems using R-Programming.  CO5 Apply Sampling Methods to septe problems using R-Programming.  CO6 Interpolate Teaching a report of the constitution of India.  CO7 Follow produced to cast vote time of the constitution of India.  CO8 Follow produced to cast vote time of the constitution.  CO9 Follow produced to cast vote time of the constitution.  CO9 Follow produced to cast vote the constitution.  CO9 Follow produced to cast vote the constitution.  CO9 Emblant Cast Story Felling For the given incident.  CO9 Emblant Cast Story Felling For the given incident.  CO9 Follow produced to cast vote attention.  CO9 Follow promate to Visuals.  CO9 Follow produced to cast vote attention.  CO9 Follow promate to Visuals.  CO9 Follow produced to cast vote attention.  CO9 Follow promate to Visuals.  CO9 Follow promate the environmental problems.  CO9 Follow promate to Visuals.  CO9 Follow promate to Visuals and promate the promate promate to visual design for the constitution of the relevant mention and computer Network.  CO9 Follow promate to Visuals and promate to Visuals and promate to visual design for given problems.  CO9 Follow pay program for immining databases and polects.  CO9 Follow pay program for immining orders.  CO9 Follow pay program for immining databases and pro |     |   |  |        |     |  |
| SY 3 STATISTICAL MODELING FOR MACHINE LEARNING 313307 CO3 Use Principles of Probablem.  SY 3 ESSENCE OF INDIAN CONSTITUTION 313002 CO5 Apply Sampling Methods to solve given problem using Ri-Rogaraming (1.1 Line) and the country.  SY 3 ESSENCE OF INDIAN CONSTITUTION 313002 CO5 Solve from the development of the country.  SY 3 DATA STORY TELLING AND VISUALIZATION 313004 CO5 Solve from the country.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314901 CO5 CO5 Coreated and subspace from the constitution.  SY 4 JAVA PROGRAMMING 314317 CO5 Develop java program for implementing brown from the relevant logal framework.  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314318 CO5 Develop java program for implementing using window-based application components.  SY 4 MATHEMATICS FOR MACHINE LEARNING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve given problem.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO5 Use procedure to solve real life problems.  SY 4 MICROPROCES |     |   | STATISTICAL MODELLING FOR MACHINE LEARNING | 313307 |     |  |
| SY 3 ESSENCE OF INDIAN CONSTITUTION 313002  SY 3 DATA STORY TELLING AND VISUALIZATION 313002  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314317  SY 4 MATHEMATICS FOR MACHINE LEARNING 314321  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UJULIX DESIGN 314005  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314321  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 5 MICROPROCESSOR PROGRAMMING 314321  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 5 MICROPROCESSOR PROGRAMMING 314321  SY 6 MICROPROCESSOR PROGRAMMING 314321  SY  |     | 3 |  |        | _   |  |
| SY 4 PATA COMMUNICATION AND COMPUTER NETWORK SY 5 PATA COMPUTER NETWORK SY 5 PATA COMMUNICATION AND COMPUTER NETWORK SY 6 PATA COMPUTER NETWORK SY  | SY  |   |  |        | _   |  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 5 MICROPROCESSOR PROGRAMMING  SY 6 MICROPROCESSOR PROGRAMMI |     |   |  |        |     |  |
| SY 3 ESSENCE OF INDIAN CONSTITUTION 313002 CO. 2 Follow fundamental rights and duties as responsible citizen of the country.  SY 3 DATA STORY TELLING AND VISUALIZATION 313004 CO. 2 Follow procedure to cast vote using voter-id.  SY 4 DATA STORY TELLING AND VISUALIZATION 313004 CO. 2 Follow procedure to cast vote using voter-id.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO. 2 Foreign and substance attention.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO. 3 Construct Storytelling for the given incident.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO. 3 Construct Storytelling for the given incident.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO. 3 Construct Storytelling for the given incident.  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO. 3 Construct Storytelling for the given incident.  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314317 CO. 3 Construct Storytelling for the given incident.  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314318 CO. 3 Construct Storytelling for the given incident.  SY 4 MATHEMATICS FOR MACHINE LEARNING 314318 CO. 3 Construct Storytelling for the given incident.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construct Storytelling for the given incident.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construct Storytelling for the given incident.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construct Storytelling for the given incident.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construct Storytelling for the given incident to situate using value and construction.  Sy 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construction and Computer Network.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construction and Computer Network.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construction and Computer Network.  SY 4 MICROPROCESSOR PROGRAMMING 314321 CO. 3 Construction and Computer Network.  SY 5 CO. 4 Develop juay program for managing database And Co. 4 Configured International Contemption and Computer Network.  SY 5 CO. 5 Con |     |   |  |        | CO5 | Apply Sampling Methods to solve given problem using R-Programming                      |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 5 S S S S S S S S S S S S S S S S S S  |     |   | ESSENCE OF INDIAN CONSTITUTION             |        | CO1 | List salient features and characteristics of the constitution of India.                |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 5 SE PROGRAMMING  SY 6 SE PROGRAMMING  S | cv  | 3 |  | 313002 | CO2 | Follow fundamental rights and duties as responsible citizen of the country.            |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING SY 5 MICROPROCESSOR PROGRAMMING SY 6 MICROPROCESSOR PROGRAMMING SY 7 MICROPROCESSOR PROGRAMMING SY 7 MICROPROCESSOR PROGRAMMING SY 8 MICROP | 31  |   |  |        | CO3 | Analyze major constitutional amendments in the constitution.                           |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY SY 4 JAVA PROGRAMMING SY 4 JAVA PROGRAMMING SY 4 JAVA PROGRAMMING SY 4 DATA COMMUNICATION AND COMPUTER NETWORK SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING SY 5 SY 4 MICROPROCESSOR PROGRAMMING SY 5 SY 4 MICROPROCESSOR PROGRAMMING SY 5   |     |   |  |        | CO4 | Follow procedure to cast vote using voter-id.  |
| SY 4 PATA COMMUNICATION AND COMPUTER NETWORK SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING SY 5 MICROPROCESSOR PROGRAMMING SY 6 MICROP |     |   | DATA STORY TELLING AND VISUALIZATION       | 313004 | CO1 | Identify the characters in data storytelling.  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 JAVA PROGRAMMING  SY 4 JAVA PROGRAMMING  SY 4 JAVA PROGRAMMING  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 5 MICROPROCESSOR PROGRAMMING  SY 6 MICROPROCESSOR PROGRAMMI |     |   |  |        | CO2 | Eliminate clutter to grab audience attention.  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  SY 4 JAVA PROGRAMMING  S14317  SY 4 JAVA PROGRAMMING  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 5 MICROPROCESSOR PROGRAMMING  SY 6 MICROPROCESSOR PROGRAMM | SY  | 3 |  |        | CO3 | Construct Storytelling for the given incident.   |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY  YA BURGHAMATION AND SUSTAINABILITY   |     |   |  |        | CO4 |  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301  SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301  SY 4 JAVA PROGRAMMING 314317  ADATA COMMUNICATION AND COMPUTER NETWORK 314318  SY 4 MATHEMATICS FOR MACHINE LEARNING 314321  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 DUJUX DESIGN 314005  SY 4 DUJUX DESIGN 314005  SY 5 4 DUJUX DESIGN 314005  SY 5 5 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 5 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 5 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 6 COUNTY TO A STANDARD COMPUTER NETWORK 314321  SY 7 8 MATHEMATICS FOR MACHINE LEARNING 314321  SY 8 MACHINE LEARNING 314321  SY 9 MACHINE LEARNING 314 |     |   |  |        | CO5 |  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY 314301 CO2 Provide the green solution to the relevant environmental problems.  SY 4 JAVA PROGRAMMING 314317 CO3 Conduct SWOT analysis of biodiversity hotspot CO4 Apply the relevant measures to mitigate the environmental pollution. Implement the environmental pollution. Implement the environmental pollution. Implement the group pave program to might the environmental pollution. Implement the environmental pollution. Implemental pollution. Implementation pollution. Implementati |     |   | ENVIRONMENTAL EDUCATION AND SUSTAINABILITY | 314301 | CO1 |  |
| SY 4 ENVIRONMENTAL EDUCATION AND SUSTAINABILITY    SY 4 JAVA PROGRAMMING    SY 4 DATA COMMUNICATION AND COMPUTER NETWORK    SY 4 MATHEMATICS FOR MACHINE LEARNING    SY 4 MICROPROCESSOR PROGRAMMING    SY 4 MICROPROCESSOR PROGRAMMING    SY 4 DIVIVA DESIGN    SY 4 MICROPROCESSOR PROGRAMMING    SY 4 DIVIVA DESIGN    SY 4 DIVIVA DESIGN    SY 4 DIVIVA DESIGN    SY 4 DIVIVA DESIGN    SY 5 4 DIVIVA DESIGN    SY 5 4 DIVIVA DESIGN    SY 5 5 4 DIVIVA DESIGN    SY 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5   |     |   |  |        | CO2 |  |
| SY 4 JAVA PROGRAMMING 314317  SY 4 JAVA PROGRAMMING 314318  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UJ/UX DESIGN 314025  SY 4 UJ/UX DESIGN 314005  Select appropriate to measures to mitigate the environmental pollution. Implement the elevant measures to mitigate the environmental pollution. Implement the elevant measures to mitigate the environmental pollution. Implement the elevant measures to mitigate the environmental pollution. Implement the environmental pollution. Implement the elevant measures to mitigate the environmental pollution. Implement the elevant measures to mitigate the environmental pollution. Implement the environmental pollution. Impleme | SY  | 4 |  |        | _   |  |
| SY 4 JAVA PROGRAMMING 314317  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314318  SY 4 MATHEMATICS FOR MACHINE LEARNING 314320  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UJ/UX DESIGN 314301  SY 5 SY   |     |   |  |        |     |  |
| SY 4 JAVA PROGRAMMING 314317  YAVA PROGRAMMING 314317  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK SY 4 MATHEMATICS FOR MACHINE LEARNING 314318  SY 4 MATHEMATICS FOR MACHINE LEARNING SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UI/UX DESIGN 314005  SY 4 UI/UX DESIGN 314005  SY 4 UI/UX DESIGN 314005  SY 5 4 UI/UX DESIGN 314005  SY 5 5 5 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5   |     |   |  |        | _   |  |
| SY 4 JAVA PROGRAMMING  314317  4 JAVA PROGRAMMING  314317  5Y 4 JAVA PROGRAMMING  314318  5Y 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 4 MICROPROCESSOR PROGRAMMING  SY 4 UNIVA DESIGN  SY 4 UNIVA DESIGN  314318  CO2 Develop java program for implementing event handling using window-based application components.  CO3 Develop java program for managing database  LO34 Components.  Implements network programming in java.  Select relevant Transmission Aging database  CO3 Analyze the functioning of Data Communication and Computer Network.  Select relevant Transmission Errors with respect to IEEE standards.  CO4 Configure different TCP/IP services.  CO5 Use partial differentiation concept to obtain optimal solution.  CO5 Implement relevant Network Topology using Networking Devices.  Use partial differentiation and integration functions.  CO5 Apply the linear programming problem concept to obtain optimal solution.  Apply the linear programming problem concept to obtain optimal solution.  Apply the linear programming problem concept to obtain optimal solution.  Apply the linear programming problem concept to obtain optimal solution.  Apply the linear programming problem concept to obtain optimal solution.  CO5 Use program development tools and assembler directives.  CO6 Use program development tools and assembler directives.  CO7 Use procedures and macros to develop an assembly language program for a given problem.  Explain design thinking concept  Interpret user requirements.  SY 4 UI/UX DESIGN  314005  CO7 Co4 Develop java program for implement helevant implement the addressing modes.  CO6 Use the properties of the functions using design tool.  CO7 Co4 Develop java program for a given problem.  CO7 Co4 Develop java program for a given problem.  CO8 Select relevant Transmission design for given problem.  |     |   |  |        |     |  |
| SY 4 JAVA PROGRAMMING  314317  CO3 Develop program to implement multithreading and exception handling.  Develop java program for implementing event handling using window-based application components.  CO5 Implements network programming in java.  CO6 Develop java program for managing database  CO7 Analyze the functioning of Data Communication and Computer Network.  CO2 Select relevant Transmission Media and Switching Techniques as per need.  CO3 Analyze the Transmission Errors with respect to IEEE standards.  CO6 Configure different TCP/IP services.  Implement network Topology using Networking Devices.  CO7 Configure different TCP/IP services.  CO8 Implement relevant Network Topology using Networking Devices.  CO9 Suild programs to implement basic operations based on vectors and tensors.  CO9 Suild programs to implement multithreading and exception handling.  CO9 Develop java program for implement multithreading and exception handling.  CO9 Develop java program for implement multithreading and exception handling.  Develop java program for implement multithreading and exception handling.  CO8 Develop java program for implement multithreading and exception functions.  CO8 Develop java program for managing database  CO9 Select relevant Transmission Media and Switching Techniques as per need.  CO9 Use program to implement Tublit in programs in Errors with respect to IEEE standards.  CO9 Use program to implement Develop in Switching Techniques as per need.  CO9 Evaluate to TCP/IP services.  CO9 Evaluate numerical differentiation concept to Obtain optimal solution.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Use program for a given to base on vectors and tensors.  CO9 Use program development tools and assembler directives.  CO9 Use program for a given task using assembler.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  Evaluate TCP/IP services.  CO9 Use procedures and macros to d |     | 4 | JAVA PROGRAMMING                           |        |     |  |
| SY 4 JAVA PROGRAMMING  314317  CO4 Develop java program for implementing event handling using window-based application components.  CO5 Implements network programming in java.  CO6 Develop java program for managing database  CO1 Analyze the functioning of Data Communication and Computer Network.  Select relevant Transmission Media and Switching Techniques as per need.  CO3 Analyze the Transmission Media and Switching Techniques as per need.  CO4 Configure different TCP/IP services.  CO5 Implement relevant Network Topology using Networking Devices.  CO5 Implement relevant Network Topology using Networking Devices.  CO6 Use partial differentiation concept to obtain optimal solution.  CO7 Implement relevant Network Topology using Networking Devices.  CO8 Build programs to implement basic operations based on vectors and tensors.  CO8 Evaluate numerical differentiation and integration functions.  Apply the linear programming problem concept to obtain optimal solution.  Analyze the functional block diagram of 8086 microprocessor.  CO8 Use program development tools and assembler directives.  CO9 Use program development tools and assembler directives.  CO9 Use program development tools and assembler and integration functions.  CO9 Use program development tools and assembler and sensors of the functional block diagram of 8086 microprocessor.  CO9 Use program development tools and assembler and sensors of the functional block diagram of 8086 microprocessor.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Explain design thinking concept  CO9 Interpret user requirements.  CO9 Create interactions using design tool.   |     |   |  | 314317 |     |  |
| CO4 components.  CO5 Implements network programming in java.  CO6 Develop java program for managing database  CO1 Analyze the functioning of Data Communication and Computer Network.  CO2 Select relevant Transmission Media and Switching Techniques as per need.  Analyze the functioning of Data Communication and Computer Network.  CO2 Select relevant Transmission Errors with respect to IEEE standards.  CO3 Analyze the functioning of Data Communication and Computer Network.  CO3 Select relevant Transmission Errors with respect to IEEE standards.  CO4 Configure different TCP/IP services.  CO5 Implement relevant Network Topology using Networking Devices.  CO6 Use partial differentiation concept to obtain optimal solution.  CO7 Implement matrix concept to solve real life problems.  CO8 Suild programs to implement basic operations based on vectors and tensors.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Apply the linear programming problem concept to obtain optimal solution.  CO1 Analyze the functional block diagram of 8086 microprocessor.  CO9 Use program development tools and assembler directives.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Develop an assembly language program for a given problem.  CO1 Explain design thinking concept  CO2 Interpret user requirements.  CO3 Select appropriate visual design for given problem.  | SY  |   |  |        |     |  |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SI 5 Select relevant Transmission Media and Switching Techniques as per need.  CO3 Analyze the Transmission Media and Switching Techniques as per need.  CO4 Configure different TCP/IP services.  CO5 Implement relevant Network Topology using Networking Devices.  CO5 Implement relevant Network Topology using Networking Devices.  CO6 Implement relevant Network Topology using Networking Devices.  CO7 Use partial differentiation concept to obtain optimal solution.  Implement matrix concept to solve real life problems.  CO8 Build programs to implement basic operations based on vectors and tensors.  CO9 Apply the linear programming problem concept to obtain optimal solution.  Analyze the Transmission Errors with respect to IEEE standards.  CO1 Use partial differentiation concept to obtain optimal solution.  Apply the linear programming problem concept to obtain optimal solution.  Analyze the functional block diagram of 8086 microprocessor.  CO9 Use program development tools and assembler directives.  CO9 Use program for a given problem.  CO9 Use program for a  | ٥.  |   |  |        | CO4 |  |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  SY 4 MATHEMATICS FOR MACHINE LEARNING  SY 4 MICROPROCESSOR PROGRAMMING  SY 4 MICROPROCESSOR PROGRAMMING  SY 4 UI/UX DESIGN  SY 4 UI/UX DESIGN  SY 4 UI/UX DESIGN  CO6 Develop java program for managing database  CO7 Analyze the functioning of Data Communication and Computer Network.  CO8 Select relevant Transmission Media and Switching Techniques as per need.  CO2 Select relevant Transmission Media and Switching Techniques as per need.  CO3 Analyze the Transmission Errors with respect to IEEE standards.  CO4 Configure different TCP/IP services.  Implement relevant Network Topology using Networking Devices.  Implement relevant Network Topology using Networking Devices.  CO5 Implement matrix concept to obtain optimal solution.  CO6 Evaluate numerical differentiation concept to obtain optimal solution.  CO7 Evaluate numerical differentiation and integration functions.  CO8 Apply the linear programming problem concept to obtain optimal solution.  CO9 Use program development tools and assembler directives.  CO9 Use program development tools and assembler tools and assembler directives.  CO9 Use procedures and macros to develop an assembly language program for a given task using assembler.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Evalain design thinking concept  Interpret user requirements.  CO9 Select appropriate visual design for given problem.  CO9 Select appropriate visual design for given problem.  |     |   |  |        | CO5 |  |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 314318    CO1   |     |   |  |        | _   |  |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK  314318  CO2 Select relevant Transmission Media and Switching Techniques as per need.  CO3 Analyze the Transmission Errors with respect to IEEE standards.  CO4 Configure different TCP/IP services.  CO5 Implement relevant Network Topology using Networking Devices.  CO5 Implement relevant Network Topology using Networking Devices.  CO6 Use partial differentiation concept to obtain optimal solution.  CO7 Implement matrix concept to solve real life problems.  CO8 Build programs to implement basic operations based on vectors and tensors.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Analyze the functional block diagram of 8086 microprocessor.  CO9 Use program development tools and assembler directives.  CO9 Use instructions in different addressing modes.  CO9 Use instructions in different addressing modes.  CO9 Develop an assembly language program for a given task using assembler.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Use instructions in different addressing modes.  CO9 Develop an assembly language program for a given problem.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Use instructions in different addressing modes.  CO9 Develop an assembly language program for a given problem.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Evaluate numerical differentiation and integration functions.  CO9 Use instructions using design tool.  |     |   |  |        |     |  |
| SY 4 DATA COMMUNICATION AND COMPUTER NETWORK 2014 Analyze the Transmission Errors with respect to IEEE standards.  CO2 Analyze the Transmission Errors with respect to IEEE standards.  CO3 Analyze the Transmission Errors with respect to IEEE standards.  CO4 Configure different TCP/IP services.  CO5 Implement relevant Network Topology using Networking Devices.  CO5 Implement relevant Network Topology using Networking Devices.  CO6 Implement matrix concept to obtain optimal solution.  CO7 Implement matrix concept to solve real life problems.  CO8 Build programs to implement basic operations based on vectors and tensors.  CO3 Build programs to implement basic operations based on vectors and tensors.  CO4 Evaluate numerical differentiation and integration functions.  Apply the linear programming problem concept to obtain optimal solution.  Analyze the Transmission Errors with respect to IEEE standards.  CO4 Evaluate numerical differentiation concept to obtain optimal solution.  CO5 Apply the linear programming problem concept to obtain optimal solution.  CO6 Use program development tools and assembler directives.  CO7 Use program development tools and assembler tools and assembler and assembler and assembly language program for a given task using assembler.  CO7 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Explain design thinking concept  CO9 Interpret user requirements.  CO9 Select appropriate visual design for given problem.  CO9 Evale interactions using design tool.  |     | 4 | DATA COMMUNICATION AND COMPUTER NETWORK    | 314318 |     |  |
| SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UI/UX DESIGN 4 UI/UX DESIGN ACHINE LEARNING 31400 CO4 Coreat interpreture int | cv  |   |  |        |     |  |
| SY 4 MATHEMATICS FOR MACHINE LEARNING 314320 CO1 Implement relevant Network Topology using Networking Devices.  WATHEMATICS FOR MACHINE LEARNING 314320 Use partial differentiation concept to obtain optimal solution.  CO2 Implement matrix concept to solve real life problems.  CO3 Build programs to implement basic operations based on vectors and tensors.  CO4 Evaluate numerical differentiation and integration functions.  CO5 Apply the linear programming problem concept to obtain optimal solution.  CO6 Analyze the functional block diagram of 8086 microprocessor.  CO7 Use program development tools and assembler directives.  CO8 Use instructions in different addressing modes.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Use procedures and macros to develop an assembly language program for a given problem.  CO9 Interpret user requirements.  CO9 Select appropriate visual design for given problem.  CO9 Create interactions using design tool.   | 31  |   |  |        | _   |  |
| SY 4 MATHEMATICS FOR MACHINE LEARNING 314320  SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UI/UX DESIGN 31400  SY 5 Use partial differentiation concept to obtain optimal solution.  SY 4 UI/UX DESIGN 31400  SY 5 Use partial differentiation concept to obtain optimal solution.  SY 4 UI/UX DESIGN 31400  SY 6 Use partial differentiation concept to obtain optimal solution.  SY 6 Use program development tools and assembler directives.  SY 6 Use procedures and macros to develop an assembly language program for a given problem.  SY 6 UI/UX DESIGN 314005  SY 6 Use procedures and macros to develop an assembly language program for a given problem.  SY 6 UI/UX DESIGN 314005  SY 6 Use procedures and macros to develop an assembly language program for a given problem.  CO1 Explain design thinking concept  Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   |     |   |  |        |     |  |
| SY 4 MATHEMATICS FOR MACHINE LEARNING  314320  314320  CO2 Implement matrix concept to solve real life problems.  CO3 Build programs to implement basic operations based on vectors and tensors.  CO4 Evaluate numerical differentiation and integration functions.  CO5 Apply the linear programming problem concept to obtain optimal solution.  Analyze the functional block diagram of 8086 microprocessor.  CO2 Use program development tools and assembler directives.  CO3 Use instructions in different addressing modes.  CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  CO6 Explain design thinking concept  CO7 Interpret user requirements.  CO8 Select appropriate visual design for given problem.  CO9 Select appropriate visual design for given problem.  CO9 Select appropriate visual design for given problem.  |     |   |  |        |     |  |
| SY 4 MATHEMATICS FOR MACHINE LEARNING  314320  CO3 Build programs to implement basic operations based on vectors and tensors.  CO4 Evaluate numerical differentiation and integration functions.  CO5 Apply the linear programming problem concept to obtain optimal solution.  CO1 Analyze the functional block diagram of 8086 microprocessor.  CO2 Use program development tools and assembler directives.  CO3 Use instructions in different addressing modes.  CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  CO6 Explain design thinking concept  CO7 Interpret user requirements.  CO8 Select appropriate visual design for given problem.  CO9 Create interactions using design tool.   |     | 4 | MATHEMATICS FOR MACHINE LEARNING           |        |     |  |
| SY 4 MICROPROCESSOR PROGRAMMING 314321 CO3 Select appropriate visual design thinking concept  UI/UX DESIGN 31400 CO4 Evaluate numerical differentiation and integration functions.  CO5 Apply the linear programming problem concept to obtain optimal solution.  Analyze the functional block diagram of 8086 microprocessor.  CO2 Use program development tools and assembler directives.  CO3 Use instructions in different addressing modes.  CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  CO6 Explain design thinking concept Interpret user requirements.  CO7 Select appropriate visual design for given problem.  CO8 Select appropriate visual design for given problem.  CO9 Create interactions using design tool.   | cv  |   |  | 214220 | _   |  |
| SY 4 MICROPROCESSOR PROGRAMMING 314321  SY 4 UI/UX DESIGN 4 UI/UX DESIGN 25  | 51  |   |  | 314320 | _   |  |
| SY 4 MICROPROCESSOR PROGRAMMING  314321  CO1 Analyze the functional block diagram of 8086 microprocessor.  Use program development tools and assembler directives.  Use instructions in different addressing modes.  CO2 Use instructions in different addressing modes.  CO3 Use instructions in different addressing modes.  CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  Explain design thinking concept  CO2 Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.  |     |   |  |        | _   | ů  |
| SY 4 MICROPROCESSOR PROGRAMMING  314321  AMICROPROCESSOR PROGRAMMING  314321  314321  AMICROPROCESSOR PROGRAMMING  314321  314321  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMING  AMICROPROCESSOR PROGRAMMING  AMICROPROCESSOR PROGRAMING  AMICROPROCESSOR PROGRAMING  AMICROPROCESSOR PROGRAMING  AMICROPROCESSOR PROGRAMMING  A |     |   |  |        |     |  |
| SY 4 MICROPROCESSOR PROGRAMMING 314321 CO3 Use instructions in different addressing modes.  CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  CO1 Explain design thinking concept  Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   |     | 4 | MICROPROCESSOR PROGRAMMING                 |        |     |  |
| SY 4 MICROPROCESSOR PROGRAMMING  314321  CO4 Develop an assembly language program for a given task using assembler.  Use procedures and macros to develop an assembly language program for a given problem.  CO1 Explain design thinking concept  CO2 Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.  |     |   |  |        |     |  |
| CO4 Develop an assembly language program for a given task using assembler.  CO5 Use procedures and macros to develop an assembly language program for a given problem.  CO1 Explain design thinking concept  Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   | SY  |   |  | 314321 | _   |  |
| SY 4 UI/UX DESIGN 314005 CO3 Select appropriate visual design tool.  CO1 Explain design thinking concept CO2 Interpret user requirements. CO3 Select appropriate visual design for given problem. CO4 Create interactions using design tool.   |     |   |  |        | CO4 | Develop an assembly language program for a given task using assembler.                 |
| SY 4 UI/UX DESIGN 314005 CO2 Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   |     |   |  |        | CO5 | Use procedures and macros to develop an assembly language program for a given problem. |
| SY 4 UI/UX DESIGN 314005 CO2 Interpret user requirements.  CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   |     | 4 | ui/ux design                               | 314005 | CO1 | Explain design thinking concept  |
| SY 4 UI/UX DESIGN 314005 CO3 Select appropriate visual design for given problem.  CO4 Create interactions using design tool.   | SY  |   |  |        |     |  |
| CO4 Create interactions using design tool.   |     |   |  |        | _   |  |
|  |     |   |  |        |     |  |
| I LUD I (reate innovative design prototype for given applications  |     |   |  |        | COS | Create innovative design prototype for given applications.                             |