| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RAS501** | **Subject Name: Managerial Economics** | |
| **Course Outcomes** | Understand the basic concepts of Engineering Economics & theory of demand. | |
| | Understand concept of supply and make use of various methods of demand forecasting for estimating demand of any product. | |
| | Explain basic concepts related to production and cost. | |
| | Outline of various market structures. | |
| | Understand nature and structure of Indian economy and basic concepts related to NI, Inflation and business cycle. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RUC501** | **Subject Name: Cyber Security** | |
| **Course Outcomes** | Explain the core information system (IS) principles | |
| | Identify the key components of Cyber Security network architecture | |
| | Apply Cyber Security architecture principles. Identify Cyber Security tools and hardening techniques | |
| | Distinguish system and application Cyber Security threats and Vulnerabilities. | |
| | Define types of incidents including categories, responses and timelines for response. | |
| | Define Cyber Security Policies, Information Cyber Security Standards-ISO, IT Act. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RCS501** | **Subject Name: Data Base Management Systems** | |
| **Course Outcomes** | Define the fundamental elements of database management system. | |
| | Understand the concept of relational data model and master the basics of SQL and construct queries using SQL, Relational Algebra and Calculus and apply query processing and optimization. | |
| | Apply design principles for logical design of databases, including normalization approach. | |
| | Analyze the basic issues of transaction processing system and distributed database system. | |
| | Evaluate the role of concurrency control techniques in DBMS and deadlock concepts. | |
| | Discuss the mechanism for Recovery with concurrent transaction. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RCS502** | **Subject Name: Design and Analysis of Algorithm** | |
| **Course Outcomes** | Understand and remember the complexity of certain sorting algorithms. | |
| | Understand and remember the complexity of advance data structures | |
| | Analyze the complexity of "Divide and Conquer" and "Greedy" based algorithms | |
| | Analyze the complexity of "Dynamic" , "Branch and Bound" and "Backtracking" based algorithms | |
| | Solve the classes P, NP, and NP-Complete and will be able to prove that a certain problem is NP-Complete. | |
| | Analyze different algorithms based on randomization and approximation. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RCS503** | **Subject Name: Principles of Programming Languages** | |
| **Course Outcomes** | Recall the Role of Programming Languages and Language Paradigms. | |
| | Identify concepts related to Modeling Language. | |
| | Implement Modeling Language to solve engineering problems. | |
| | Test background for choosing appropriate languages. | |
| | Judge the appropriate programming language according to the ideas/ problem. | |
| | Investigate the Overall advancement of computing. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RIT053** | **Subject Name: Object Oriented Techniques** | |
| **Course Outcomes** | Outline basic terminology and components in information storage and retrieval systems. | |
| | Compare and contrast information retrieval models and internal mechanisms and to analyze performance of retrieval systems when dealing with unmanaged data sources. | |
| | Apply IR principles to locate relevant information large collections of data. | |
| | Understand the design and implementation of retrieval systems for text and other media. | |
| | Implement retrieval systems for web search tasks. | |
| | Appreciate the capabilities and limitations of information retrieval systems. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RCS551** | **Subject Name: Database Management System Lab** | |
| **Course Outcomes** | Formulate SQL queries based on the problems given. | |
| | Solve time effective solutions, and able to apply PL/SQL. | |
| | Develop understanding of different applications and constructs of SQL PL/SQL to recommend various industry oriented and real life applications. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code:RCS-552** | **Subject Name: Design and Analysis of Algorithm Lab** | |
| **Course Outcomes** | Understand and remember sorting, searching algorithm approaches. | |
| | Write efficient programs for sorting, searching and greedy approach based algorithms. | |
| | Implement travelling salesman problem, minimum spanning tree algorithm and other graph based algorithms. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RCS 553** | **Subject Name: Principle of Programming Lab** | |
| **Course Outcomes** | Programming fundamentals and to write the basic programs. | |
| | Analysis the various concepts related to LISP language. | |
| | Apply fundamentals of programming and its applications. | |

| **Branch: Information Technology** | **Year: III** | **Semester: ODD 2019-20** |
|---|---|---|
| **Subject Code: RIT 554** | **Subject Name: Object Oriented Techniques LAB** | |
| **Course Outcomes** | Understand and use the basic programming constructs of C++. | |
| | Develop software applications using object-oriented programming language in C++. | |
| | Apply object-oriented programming concepts to software problems in C++. | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RAS601** | **Subject Name: Industrial Management** | |
| **Course Outcomes** | Understand the concept of industrial management. | |
| | Understand the functions and principles of management and basic concept of HRM | |
| | Understand the process of work study and inventory control techniques | |
| | Apply various quality control techniques for process control and product control. | |
| | Understand basic concepts related to project management and control techniques. | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RAS602** | **Subject Name: Industrial Sociology** | |
| **Course Outcomes** | Comprehend social relations in industry/organization and correlate the dynamics of diverse context of Indian society. | |
| | Understand the global rise and development of industry and empower themselves to analyze and evaluate different aspects of industrialization. | |
| | Demonstrate the implications of policies and its consequences in the context of industrialization and its | |

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| | growth in India. |
| | Evaluate the social consequences of modernization, automation and industrial activities on the ecosystem thereby, sensitizing the engineers on public health and safety issues which shall serve as cornerstone for cultural, societal and environmental considerations. |
| | Envisage prospective models of industrialization across the globe to understand the consumer society and the sociological concerns of industrial development in the present world. |
| | Gain and recognize the need for bridging the implications of sociological theories with engineering sciences and encourage themselves for lifelong learning. |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RCS601** | **Subject Name: Computer Networks** | |
| **Course Outcomes** | Understanding of computer networking fundamentals with data communication system and TCP/IP & OSI reference model | |
| | Analyze the requirements for a given organizational structure and selection of appropriate network architecture and topology | |
| | Specify and identify working limitation in existing protocols of networking layers and try to formulate new and better protocols | |
| | Explain the services and design issues of Transport layer, Session layer and Presentation layer and able to Compare and contrast TCP and UDP protocol. | |
| | State basic understanding of the use of cryptography and network security | |
| | Explain the functions of Application layer and Presentation layer paradigms and Protocols. | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RCS602** | **Subject Name: Compiler Design** | |
| **Course Outcomes** | Describe the fundamentals of Compilation Process for each phase and Tools required for generating a compiler. | |
| | Summarize and Apply the different Parsing Techniques to parse the given string. | |
| | Determine the unambiguous parse tree by using given Syntax directed translation | |
| | Use appropriate data structure for symbol table management; identify errors in each phase of compilation process. | |
| | Write three address code, postfix notation and syntax tree for the given expression. | |
| | Perform code optimization techniques for the given three address code. | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RIT 601** | **Subject Name: Web Technology** | |
| **Course Outcomes** | Understand general purpose programmable predefined functions | |
| | Apply validation using JavaScript. | |
| | Develop a dynamic webpage by the use of JavaScript and DHTML | |
| | Write a server side java application called Servlet to catch form data sent from client, process it and store it on database. | |
| | Connect a java program to a DBMS and perform insert, update and delete operations on DBMS table | |
| | Develop a webpage by the use of server side scripting like PHP | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RIT602** | **Subject Name: Data warehousing & Data Mining** | |
| **Course Outcomes** | Identify the scope and necessity of Data Mining & Warehousing for the society. | |
| | Describe the design of data warehousing so that it can be able to solve the root problem. | |
| | Understand the importance of data mining and the principles of business intelligence | |
| | Explain the techniques of clustering, classification, association finding and feature selection on real world data | |
| | Describe data visualization, web mining, spatial mining and temporal mining. | |
| | Design a data mining process for an application, including data preparation, modeling and evaluation | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RCS651** | **Subject Name: Computer Networks Lab** | |
| **Course Outcomes** | To understand and simulate various type of network topologies using tool like CISCO packet tracer, Omnet++, NS3 etc. | |
| | Ability to do network simulation case studies and packet level analysis. | |
| | To implement Socket Programming and Connecting to remote systems. | |

| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
|---|---|---|
| **Subject Code: RCS 652** | **Subject Name: Compiler Design Lab** | |
| **Course Outcomes** | Design lexical analyzer and DFA's for regular expressions. | |
| | Implement top-down and bottom up Parsers. | |

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| | Design intermediate code and apply code optimization techniques. |

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| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
| **Subject Code: RIT 651** | **Subject Name: Web Technology Lab** | |
| **Course Outcomes** | Understand and design web pages for different applications. | |
| | Write code in html, xml, JavaScript, asp for web page designing. | |
| | Develop e-commerce, etc websites. | |

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| **Branch: Information Technology** | **Year: III** | **Semester: EVEN 2019-20** |
| **Subject Code: RCS 654** | **Subject Name: Data Warehouse and Data mining Lab** | |
| **Course Outcomes** | Implement the mining techniques for realistic data and data pre-processing in ORACLE. | |
| | Demonstrate the classification and clustering techniques in large datasets. | |
| | Apply algorithms to solve data mining problems using WEKA tool. | |