



SINHGAD TECHNICAL EDUCATION SOCIETY'S
**SINHGAD INSTITUTE OF
 MANAGEMENT & COMPUTER APPLICATION**

(Affiliated to Savitribai Phule Pune University & Approved by AICTE)

'NAAC' Accredited with 'A' Grade



S. No.49/1, Off Westery Bypass, Pune-Mumbai Expressway, Narhe, Pune - 411 041, Tel.: (020) 66831896 / 66831908 / 66831907
 E-mail : director_mba_simca@sinhgad.edu Website : www.sinhgad.edu

Prof. M. N. Navale
 M.E. (Elec), MIE, MBA
 FOUNDER PRESIDENT

Dr. (Mrs.) Sunanda M. Navale
 B.A., M.P.M., Ph.D.
 FOUNDER SECRETARY

Dr. Anamika Singh
 B.Sc., MBA, Ph.D., IMA (F.D.P)
 DIRECTOR

2.6.2 Attainment of POs, PSOs and Cos

To measure the attainment of POs, PSOs and COs, of MCA course institute has developed mechanism as follows:

Continuous evaluation during semester: As institute practices CIE rigorously where performance of each candidate is continuously assessed by the respective subject teacher during sessions. These outcomes are also evaluated through various activities and subjects specific evaluation conducted by the subject teacher. At the end of every semester End semester examinations are also conducted. Apart from this the level of attainment of COs is evaluated through students' performance during entire semester by subject teacher.

Evaluation at the end of semester: Students' performance is evaluated throughout every semester through analysis of University examination (Mid term, End term, Presentations, theory, online and VIVA VOCE) results. It gives understanding of attainment of COs of the courses undertaken by the students during the academic year. It also helps in mapping attained COs with prescribed POs.

List of various evaluation criteria is listed below

| Sr. No. | Particulars | Frequency in Semester |
|---------|--------------------------|-----------------------|
| 1 | Mid Term Examination(30) | 1 |
| 2 | End Term Examination(70) | 1 |
| 3 | Assignments/Case Study | 4 |
| 4 | Presentation | 1 |
| 5 | Attendance | 75% |
| 6 | Case Studies | 2 |
| 7 | Practical | 55 |
| 8 | Mini Project | 1 |

The course attainment for MCA (Master of Computer Application) for academic year 2021-2022 is shown below.



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**Sinhgad Technical Education Society's
Sinhgad Institute of Management and Computer Application
Narhe, Pune 411041
2021-22**

Class: MCA - II SEM-III

Subject: CC

Assignment no.1

Date: 25 Jan 22

Submission Date: 5 Feb 22

Answer the following questions:

1. Explain characteristics, benefits and Applications of IAAS, PAAS, SAAS.
2. What is Virtualization? Explain types of Virtualization.
3. What are Cloud Computing Security Challenges
4. Write short note:
 - a) Machine Image
 - b) VMware
 - c) Cloud Governance

Assignment no.2

- 1) Explain Cloud Migration Strategies and Process.
- 2) What is Service Oriented Architecture? Differentiate between SOAP and REST.
- 3) Write short note:
 - a) Service Level Agreement
 - b) Cloud Availability
 - c) Dockers Container

Dr. Rajesh Gawali
Subject Teacher



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Sinhgad Technical Education Society's
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MCA Program
Mid-Term Examination June - 2022

Subject: Python Programming

Date: 28/06/2022

Class: MCA – I SEM - II

Maximum Marks: 30

- Instructions:** 1) Question 1 and 6 are compulsory
 2) Solve any 3 questions from 2 to 5.
 3) Each Questions carry equal marks.

| | | |
|---|---|-----|
| Q.1) | Select the correct option | [6] |
| 1. Which of the following statement is invalid? A. m_n_q=3500 B. m.n.q=3500,3600,3700 C. m,n,q=3500,3600,3700 D. D. mnq=350036003700 | 2. Which of the following is valid variable name? A. .ram2 B. Ram.2 C. Ram_22 D. ram@20 | |
| 3. Consider the variable a and b Values of a and b are 280 and 15 respectively The operation that returns the remainder is A. a/b B. a+b C. a%b D. a//b | 4. The command used to add elements in a list is A. append() B. extend() C. insert() D. All above | |
| 5. The object a={"a":101,"b":102} is a A. Dictionary B. Set C. List D. Tuple | 6. Which of the following method can be used to initialize multiple variables with a common values? 1. x=y=y=33, 2. x=y=z=33, 3. x=33 y=x z=y 4. x,y,z=33 A. 1 and 2 B. 2 and 3 C. 1 and 4 D. 2 and 4 | |
| 7. Which of the following statement(s) is /are True? (I) Functions take multiple inputs (II) Functions can return only one output . A. I-True, II-False B. I-False, II-True C. I-True, II-True D. I-False, II-False | 8. Variable 'a' is defined as a = 'gOOd moRning' Command to convert 'a' from 'gOOd moRning' to 'Good Morning' is:- A. a.upper() B. a.title() C. a.sting() D. a.lower() | |
| 9. The output of the code given below is n = [x*x for x in range(4)] print(n) | 10. The output of the code given below is list = [2, 4, 6, 8] a = (x**3 for x in list) print(next(a)) | |



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| | | |
|---|--|-----|
| <p>A. [1, 4, 9] B. [1, 4, 9, 16] C. [0, 1, 4, 9] D. [0, 1, 4, 9, 16]</p> | <p>A. 4 B. 6 C. 8 D. 16</p> | |
| <p>11. How are lambda functions useful? Select all that apply:</p> <p>A. Lambda functions always make code easier to read. B. They are useful in allowing quick calculations or processing as the input to other functions. C. Lambda functions are not used for functional programming. D. Lambda functions are used for functional programming.</p> | <p>12. Which of the following functions is a built-in function aggregation function in python</p> <p>A. print() B. input() C. min() D. None</p> | |
| Q.2) | What are non-primitive data types? Explore important methods and properties of list | [6] |
| Q.3) | Differentiate recursive and non-recursive function? Write a program to print Fibonacci series using recursive method. | [6] |
| Q.4) | <p>Create a data frame student with fields (Roll No, Name, Class, Gender, Address, Sub1,subj2...subjn. Convert data frame into csv file Write a query to calculate total marks and add the column Write a query to calculate percentage using function lambda Display records whose percentage is greater than 60 Drop column Address Encode Male as 1 and Female as 2</p> | [6] |
| Q.5) | Explain Map, Reduce and Lambda functions. Accept temperature from 10 cities and convert into Fahrenheit by using appropriate function. | [6] |
| Q.6) | <p>Write Short Notes (Any 2) Role of Python in AI and Data science Iterator, Generator and Decorator List Vs. Numpy Map, Reduce and Lambda functions</p> | [6] |

***** All the Best *****



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CO PO MAPPING OF MCA

PROGRAM OUTCOMES OF MCA

| | |
|---|--|
| Program | MCA |
| Program Full Title | Master of Computer Application |
| Program Credit | 160 (2019 P) |
| Semester | 4 Semester in 2 years (2020 P) |
| | 6 Semester in 3 years (2019 P) |
| Program Outcomes: At the end of the MCA programme the learner will possess the following Program Outcome | |
| PO1 | Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements. |
| PO2 | Identify, formulate, research literature, and solve complex Computing problems reaching substantiated conclusions using fundamental principles of Mathematics, Computing sciences, and relevant domain disciplines. |
| PO3 | Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations. |
| PO4 | Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions. |
| PO5 | Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations. |
| PO6 | Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice. |
| PO7 | Recognize the need, and have the ability, to engage in independent learning for continual development as a Computing professional. |
| PO8 | Demonstrate knowledge and understanding of computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. |
| PO9 | Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions. |



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| | |
|------|---|
| PO10 | Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice. |
| PO11 | Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments. |
| PO12 | Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large. |

COURSE OUTCOMES MCA (2019 P) SEMESTER I

| | |
|--|---|
| Program | MCA |
| Course Full Title | Problem Solving using C++ |
| Course Code | IT11 |
| Course Credit | 4 |
| Semester | I |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Use the algorithm paradigms for problem solving. |
| CO2 | Develop programs with features of the C++ programming language. |
| CO3 | Develop simple applications using C++ |
| CO4 | Develop programs in the UNIX/Linux programming environment. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | | | | | | | | | | | |

| | |
|--------------------------|--------------------------------|
| Program | MCA |
| Course Full Title | Software Engineering using UML |
| Course Code | IT12 |
| Course Credit | 4 |
| Semester | I |
| Internal | 30 |
| External | 70 |



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| | | | | | | | | | | | | |
|-----|---|--|---|---|--|---|--|---|--|---|--|--|
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |
| CO5 | ✓ | | | | | ✓ | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Essential of Operating System |
| Course Code | IT14 |
| Course Credit | 4 |
| Semester | I |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand structure of OS, process management and synchronization. |
| CO2 | Analyze and design Memory Management. |
| CO3 | Interpret the mechanisms adopted for file sharing in distributed Applications |
| CO4 | Conceptualize the components and can do Shell Programming. |
| CO5 | Know Basic Linux System Administration and Kernel Administration. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |
| CO5 | ✓ | | | | | ✓ | | ✓ | | | | |

| | |
|--------------------------|-------------------------|
| Program | MCA |
| Course Full Title | Business Process Domain |
| Course Code | BM11 |
| Course Credit | 4 |
| Semester | I |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |



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| Course Outcomes: On successful completion of this course, the learner will be able to | |
|--|---|
| CO1 | Describe major bases for marketing mix in business |
| CO2 | Describe various functionalities of human resource process |
| CO3 | Identify existing e-commerce model and payment system |
| CO4 | Apply knowledge to evaluate and manage an effective supply chain. |
| CO5 | Understand how customer relations are related to business functions and its importance to success of Business entity. |
| CO6 | Use various banking and insurance process for business development. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | | | | | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | | | |
| CO5 | ✓ | ✓ | | ✓ | | | | ✓ | | ✓ | ✓ | ✓ |
| CO6 | ✓ | ✓ | | ✓ | | | ✓ | ✓ | ✓ | | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 1 |
| Course Code | OS11 |
| Course Credit | 1 |
| Semester | I |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |

| | |
|--------------------------|----------------|
| Program | MCA |
| Course Full Title | Open Subject 2 |
| Course Code | OS12 |
| Course Credit | 1 |



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| | |
|--|--|
| Semester | I |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Case Study on Requirement Gathering |
| Course Code | CS11 |
| Course Credit | 1 |
| Semester | I |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive student to gather information regarding problem and then analyzing it to build efficient software. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |

| | |
|--------------------------|--------------------------------|
| Program | MCA |
| Course Full Title | Practical based on IT11 |
| Course Code | IT11L |
| Course Credit | 2 |
| Semester | I |
| Internal | 50 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |



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| Course Outcomes: On successful completion of this course, the learner will be able to | |
|--|----------------------------|
| CO1 | Understanding the problem |
| CO2 | Analyzing the problem |
| CO3 | Developing the solution |
| CO4 | Coding and implementation. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | ✓ | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | | | | | | | |
| CO3 | ✓ | | | ✓ | | | | ✓ | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| Program | MCA |
|--|----------------------------------|
| Course Full Title | Practical based on OS11 and OS12 |
| Course Code | OS11L |
| Course Credit | 2 |
| Semester | I |
| Internal | 50 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understanding the problem |
| CO2 | Analyzing the problem |
| CO3 | Developing the solution |
| CO4 | Coding and implementation. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | ✓ | | ✓ | | ✓ | | | | | |
| CO2 | ✓ | | ✓ | | ✓ | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | |
| CO4 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ |

| | |
|--------------------------|--------------|
| Program | MCA |
| Course Full Title | Soft Skill-1 |
| Course Code | SS11L |
| Course Credit | 1 |
| Semester | I |



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| | |
|--|---|
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | To improve the vocabulary of English and competency for business English. |
| CO2 | Use of language lab |
| CO3 | English learning tools such as mobile apps like Sling etc. are also encouraged and lot of listening practice, reading and understanding exposure should be given to the students. |
| CO4 | Interested students may appear for Cambridge English exam after completion of 1st year. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO4 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |

COURSE OUTCOMES MCA (2019 P) SEMESTER II

| | |
|--|---|
| Program | MCA |
| Course Full Title | Data Structure and Algorithm |
| Course Code | IT21 |
| Course Credit | 4 |
| Semester | II |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Apply design principles and concepts for Data structure and algorithm |
| CO2 | Summarize searching and sorting techniques |
| CO3 | Describe stack, queue and linked list operation |
| CO4 | Demonstrate the concepts of tree and graphs |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|



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| | | | | | | | | | | | | |
|-----|---|--|---|---|--|---|--|--|--|---|--|--|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Web Technology |
| Course Code | IT22 |
| Course Credit | 4 |
| Semester | II |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Implement interactive web page(s) using HTML, CSS and JavaScript. |
| CO2 | Build Dynamic web site using server-side PHP Programming and Database connectivity. |
| CO3 | Design a responsive web site. |

| | | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | ✓ | | | | ✓ | | ✓ | | | | |

| | |
|--|---------------------|
| Program | MCA |
| Course Full Title | Business Statistics |
| Course Code | MT21 |
| Course Credit | 4 |
| Semester | II |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |



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| | |
|-----|---|
| CO1 | Demonstrate concepts of business statistics (such as measures of central tendency, dispersion, correlation, regression analysis and time series analysis) |
| CO2 | Students will be able to analyze and apply statistical tools to solve problems. |
| CO3 | based on the acquired knowledge to interpret the meaning of the calculated statistical indicators |
| CO4 | Demonstrate concept of index numbers for solving practical problems in business world |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | ✓ | | | | ✓ | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Essentials of Networking |
| Course Code | IT23 |
| Course Credit | 4 |
| Semester | II |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the basic concepts of data communication including the key aspects of networking and their interrelationship |
| CO2 | Understand various protocols such as HTTP, SMTP, POP3, IMAP, FTP, DNS, DHCP and the basic structure of IPv4, IPv6 Address and concept of sub netting with numerical |
| CO3 | Understand routing concept and working of routing protocols such as RIP, OSPF and BGP |
| CO4 | Understand various encryption techniques |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |



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| | | | | | | | | | | | | |
|-----|---|---|--|--|--|---|--|---|--|--|--|--|
| CO4 | ✓ | ✓ | | | | ✓ | | ✓ | | | | |
|-----|---|---|--|--|--|---|--|---|--|--|--|--|

| | |
|--|--|
| Program | MCA |
| Course Full Title | Principles and Practices of Management and Organizational Behavior |
| Course Code | BM21 |
| Course Credit | 4 |
| Semester | II |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Describe and analyze the interactions between multiple aspects of management. |
| CO2 | Analyze the role of planning and decision making in Organization |
| CO3 | Justify the role of leadership qualities, Motivation Group dynamics and Team Building. |
| CO4 | Compare the controlling process |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | | | | | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | | | |
| CO5 | ✓ | ✓ | | ✓ | | | | ✓ | | ✓ | ✓ | ✓ |
| CO6 | ✓ | ✓ | | ✓ | | | ✓ | ✓ | ✓ | | | ✓ |

| | |
|--|----------------|
| Program | MCA |
| Course Full Title | Open Subject 3 |
| Course Code | OS21 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |



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| | |
|-----|--|
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |
|-----|--|

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 4 |
| Course Code | OS22 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Case Study on Feasibility Study and Analysis |
| Course Code | CS21 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive student to perform feasibility study in terms of technical, economic etc. and perform data analysis |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|



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| | | | | | | | | | | | | |
|-----|---|---|--|---|--|---|--|--|--|---|--|---|
| CO1 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ |
|-----|---|---|--|---|--|---|--|--|--|---|--|---|

| | |
|--|---|
| Program | MCA |
| Course Full Title | Practical based on IT21 |
| Course Code | IT21L |
| Course Credit | 2 |
| Semester | II |
| Internal | 50 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Write an algorithm. |
| CO2 | Analyze algorithm based on time complexity. |
| CO3 | Coding and implementation using C++ |
| CO4 | Analyze program based on time complexity. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | ✓ | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | | | | | | | |
| CO3 | ✓ | | | ✓ | | | | ✓ | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| | |
|--|----------------------------------|
| Program | MCA |
| Course Full Title | Practical based on OS21 and OS22 |
| Course Code | OS22L |
| Course Credit | 2 |
| Semester | II |
| Internal | 50 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understanding the problem |
| CO2 | Analyzing the problem |
| CO3 | Developing the solution |
| CO4 | Coding and implementation. |



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| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | ✓ | | ✓ | | ✓ | | | | | |
| CO2 | ✓ | | ✓ | | ✓ | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | |
| CO4 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Soft Skill-II |
| Course Code | SS21 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Team building , Team briefing, Role of Team leader, Conflict resolution, Methodology of Group discussions, Role Functions in Group Discussion, Improving group performance, Mock group discussions |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO4 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |

COURSE OUTCOMES MCA (2019 P) SEMESTER III

| | |
|--------------------------|------------------|
| Program | MCA |
| Course Full Title | Java Programming |
| Course Code | IT31 |
| Course Credit | 4 |
| Semester | III |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |



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| Course Outcomes: On successful completion of this course, the learner will be able to | |
|--|---|
| CO1 | Understand Basic Concepts of Java and multi-threading.-Understand. |
| CO2 | Demonstrate Collection framework -Apply |
| CO3 | Develop GUI using AWT and Swing -Apply |
| CO4 | Develop Java Applications using Socket, RMI –Apply |
| CO5 | Develop Web application using JSP and Servlet, JDBC with MVC -- Apply |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| Program | MCA |
|--|---|
| Course Full Title | Data Warehouse and Data Mining |
| Course Code | IT32 |
| Course Credit | 4 |
| Semester | III |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Learn and understand techniques of preprocessing various kinds of data -Understand. |
| CO2 | Understand Data warehouse concepts. - Understand |
| CO3 | Apply association Mining Techniques on large Data Sets. - Apply |
| CO4 | Apply classification and clustering Techniques on large Data Sets. - Analyze |
| CO5 | Understand other approaches of Data mining techniques. - Understand |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Software Testing and Quality Assurance |
| Course Code | IT33 |
| Course Credit | 4 |
| Semester | III |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the role of software quality assurance in contributing to the efficient delivery of software solutions –Understand |
| CO2 | Demonstrate specific software tests with well-defined objectives and targets –Apply |
| CO3 | Apply the software testing techniques in commercial environments – Apply |
| CO4 | Construct test strategies and plans for software testing –Analyze |
| CO5 | Understand the usage of software testing tools for test effectiveness, efficiency and coverage – Understand |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| | |
|--|-----------------|
| Program | MCA |
| Course Full Title | Cloud Computing |
| Course Code | IT34 |
| Course Credit | 4 |
| Semester | III |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |



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| | |
|-----|---|
| CO1 | Describe the concepts of Cloud Computing and its Service Models & Deployment Models – Understand. |
| CO2 | Classify the types of Virtualization – Understand. |
| CO3 | Describe the Cloud Management and relate Cloud to SOA – Understand. |
| CO4 | Interpret Moving applications to of Cloud – Apply. |
| CO5 | Demonstrate practical implementation of Cloud computing – Apply. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Probability and Combinatorics |
| Course Code | MT31 |
| Course Credit | 4 |
| Semester | III |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Apply counting principles to solve the problems –Apply |
| CO2 | Apply various mathematical tools to solve problems. –Apply. |
| CO3 | Understand and apply basic probability principles. –Apply |
| CO4 | Demonstrate the concept of univariate and bivariate random variable – Apply |
| CO5 | Understand and illustrate the probability distributions.-Analyze |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |



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| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 5 |
| Course Code | OS31 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 1. | | | | ✓ | ✓ | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 6 |
| Course Code | OS32 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 2. | | | | ✓ | ✓ | | | |



SINHGAD TECHNICAL EDUCATION SOCIETY'S
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| | |
|--|---|
| Program | MCA |
| Course Full Title | Case Study on Design |
| Course Code | CS31 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive of this subject that student to perform design of problem statement towards software development |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 3. | | | | ✓ | ✓ | | ✓ | ✓ |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Practical Based on Java Programming |
| Course Code | IT31L |
| Course Credit | 2 |
| Semester | III |
| Internal | 50 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Create Web application using JSP and Servlet, JDBC with MVC |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 4. | | | | ✓ | ✓ | | ✓ | ✓ |

| | |
|--------------------------|----------------------------------|
| Program | MCA |
| Course Full Title | Practical based on OS31 and OS32 |
| Course Code | OS32L |
| Course Credit | 2 |
| Semester | III |
| Internal | 50 |
| External | NA |



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| | |
|--|----------------------------|
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understanding the problem |
| CO2 | Analyzing the problem |
| CO3 | Developing the solution |
| CO4 | Coding and implementation. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | ✓ | | ✓ | | ✓ | | | | | |
| CO2 | ✓ | | ✓ | | ✓ | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | |
| CO4 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Soft Skill-III |
| Course Code | SS31 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Nonverbal communication-Personal appearance-Posture- Gestures- Facial expressions- Eye contact-Space distancing |
| CO2 | Business Presentations: Preparing successful presentations, Planning for audience Making effective use of visual aid, Delivering presentation, using prompts, dealing with questions and interruptions, Mock presentations. |
| CO3 | Effective usage of Tools (MS PowerPoint) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |



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COURSE OUTCOMES MCA (2019 P) SEMESTER IV

| | |
|--|---|
| Program | MCA |
| Course Full Title | Python Programming |
| Course Code | IT41 |
| Course Credit | 4 |
| Semester | IV |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand concepts of python.-Understand. |
| CO2 | Demonstrate the concepts modular programming -Apply |
| CO3 | Apply the concepts of concurrency control in python -Apply |
| CO4 | Solve the real life problems using object oriented concepts and python libraries –Apply |
| CO5 | Demonstrate the concept of IO, Exception Handling, database --Apply |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO3 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Information System and Security Audit |
| Course Code | BM41 |
| Course Credit | 4 |
| Semester | IV |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Interpret the threats and vulnerabilities from IT system of business software applications. - Apply |



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| | |
|-----|---|
| CO2 | Understand Information Security Management System (ISMS) for IT system of business -Understand |
| CO3 | Apply information security policies and standards for business IT System-Apply |
| CO4 | Discuss various IS controls for Business Continuity and Disaster Recovery of business IT system. -Understand |
| CO5 | Describe information security audit and understand information security IT governance framework. – Understand |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Optimization Techniques |
| Course Code | MT41 |
| Course Credit | 4 |
| Semester | IV |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the role and principles of optimization techniques in business world -Understand |
| CO2 | Demonstrate specific optimization technique for effective decision making -Apply |
| CO3 | Apply the optimization techniques in business environments -Apply |
| CO4 | Illustrate and infer for the business scenario- Analyze |
| CO5 | Analyze the optimization techniques in strategic planning for optimal gain. - Analyze |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |



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| | | | | | | | | | | | | |
|-----|---|---|--|---|---|--|--|---|--|--|--|--|
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Essential of Architectural Framework |
| Course Code | IT42 |
| Course Credit | 4 |
| Semester | IV |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand Basics Fundamentals of Architecture and Framework. (Understand) |
| CO2 | Understand appropriate Architecture Framework design. (Understand) |
| CO3 | Select appropriate technical and industry specific frameworks. (Understand) |
| CO4 | Apply the software development process (Apply) |
| CO5 | Apply the quality of Architecture (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |

| | |
|--------------------------|--|
| Program | MCA |
| Course Full Title | Knowledge Representation and Artificial Intelligence |
| Course Code | IT43 |
| Course Credit | 4 |
| Semester | IV |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |



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| Course Outcomes: On successful completion of this course, the learner will be able to | |
|--|---|
| CO1 | Develop a basic understanding of AI building blocks presented in intelligent agents- Develop. |
| CO2 | Choose an appropriate problem solving method and knowledge representation technique – Choose. |
| CO3 | Apply the different Propositional Logic concepts for knowledge representation-Apply. |
| CO4 | Analyze and understand the models for reasoning with uncertainty and different planning and learning approaches in the field of Artificial Intelligence – Analyze and understand. |
| CO5 | Demonstrate awareness and a fundamental understanding of various applications of AI – Demonstrate. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 7 |
| Course Code | OS41 |
| Course Credit | 1 |
| Semester | IV |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 5. | | | | ✓ | ✓ | | ✓ | ✓ |



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| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 8 |
| Course Code | OS42 |
| Course Credit | 1 |
| Semester | IV |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 6. | | | | ✓ | ✓ | | ✓ | ✓ |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Case Study on Development |
| Course Code | CS41 |
| Course Credit | 1 |
| Semester | IV |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind this subject is to guide the students to apply various technologies for software development. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | 7. | | | | ✓ | ✓ | | ✓ | ✓ |

| | |
|--------------------------|---------------------------------------|
| Program | MCA |
| Course Full Title | Practical Based on Python Programming |
| Course Code | IT41L |
| Course Credit | 2 |
| Semester | IV |



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| | | | | | | | | | | | | |
|-----|---|---|--|---|--|--|---|---|---|---|--|---|
| CO3 | ✓ | | | ✓ | | | | ✓ | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Soft Skill-IV |
| Course Code | SS41 |
| Course Credit | 1 |
| Semester | IV |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Preparing resumes & CV-Covering letter (effective usage of MSWord) Self introduction during interviews |
| CO2 | Interviews – Types of Interviews, preparing for interviews (Opening, body-answer Q, close-ask |
| CO3 | Types of questions, facing interviews, reviewing performance Participating in mock interviews |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |

COURSE OUTCOMES MCA (2019 P) SEMESTER V

| | |
|--|---|
| Program | MCA |
| Course Full Title | Social Media & Digital Marketing |
| Course Code | IT51 |
| Course Credit | 4 |
| Semester | V |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Explain use of Social Media in Marketing (Understand) |
| CO2 | Demonstrate Digital Marketing Strategy (Apply) |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Software Project Management |
| Course Code | IT53 |
| Course Credit | 4 |
| Semester | V |
| Internal | 30 |
| External | 70 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the process of Software Project Management Framework and Apply estimation techniques. (Understand) |
| CO2 | Learn the philosophy, principles and lifecycle of an Agile project. (Understand) |
| CO3 | Demonstrate Agile Teams and Tools. (Apply) |
| CO4 | Apply Agile project constraints and trade-offs for estimating project size and schedule (Apply) |
| CO5 | Explain Project Tracking and Interpretation of Progress Report. (Understand) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC51 |
| Course Credit | 8 |
| Semester | V |
| Internal | 50 |
| External | 150 |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the real-world problem. (Understand) (Apply) |



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 FOUNDER SECRETARY

Dr. Anamika Singh
 B.Sc., MBA, Ph.D., IMA (F.D.P)
 DIRECTOR

| | |
|-----|--|
| CO2 | Express the need of the project through feasibility analysis and literature review. (Understand) |
| CO3 | Determine the project plan using appropriate methodology. (Apply) |
| CO4 | Implement the project design pertaining to the problem. (Apply) |
| CO5 | Demonstrate communication and team-work skills. |
| CO6 | Build and test the solution. (Create) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 9 |
| Course Code | OS51 |
| Course Credit | 1 |
| Semester | V |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | |

| | |
|--------------------------|-----------------|
| Program | MCA |
| Course Full Title | Open Subject 10 |
| Course Code | OS52 |
| Course Credit | 1 |
| Semester | V |
| Internal | 25 |
| External | NA |



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| | |
|--|--|
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Case Study on Implementation and Testing |
| Course Code | CS51 |
| Course Credit | 1 |
| Semester | V |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind this subject is to guide the students to apply various test cases and implement project. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Soft Skill-V |
| Course Code | SS51 |
| Course Credit | 1 |
| Semester | IV |
| Internal | 25 |
| External | NA |
| Specialization | NA |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Preparing resumes CV-Covering letter (effective usage of MSWord) |



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| | |
|-----|--|
| CO2 | Self-introduction during interviews Interviews – Types of Interviews, preparing for Interviews (Opening, body-answer Q, close-ask Q), Types of questions, facing interviews, reviewing performance |
| CO3 | Participating in mock interviews |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |

COURSE OUTCOMES MCA (2019 P) SEMESTER VI

| | |
|--|--|
| Program | MCA |
| Course Full Title | Open Subject 11 |
| Course Code | OS61 |
| Course Credit | 4 |
| Semester | VI |
| Internal | 100 |
| External | NA |
| Specialization | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | |

| | |
|--------------------------|--------------|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC61 |
| Course Credit | 16 |
| Semester | VI |
| Internal | 150 |
| External | 250 |
| Specialization | NA |
| Core/Elective | Core |



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| Course Outcomes: On successful completion of this course, the learner will be able to | |
|--|--|
| CO1 | Understand the real-world problem. (Understand) (Apply) |
| CO2 | Express the need of the project through feasibility analysis and literature review. (Understand) |
| CO3 | Determine the project plan using appropriate methodology. (Apply) |
| CO4 | Implement the project design pertaining to the problem. (Apply) |
| CO5 | Demonstrate communication and team-work skills. |
| CO6 | Build and test the solution. (Create) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

COURSE OUTCOMES MCA (2020 P) SEMESTER I

| | |
|--|---|
| Program | MCA |
| Course Full Title | Java Programming |
| Course Code | IT11 |
| Course Credit | 3 |
| Semester | I |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand Basic Concepts of OOPs, Java, Inheritance, Package. (Understand) |
| CO2 | Understand Exception handling, arrays and Strings and multi-threading in Java (Understand.) |
| CO3 | Understand collection framework (Understand) |
| CO4 | Develop GUI using Abstract Windows Toolkit (AWT) and event handling (Apply) |
| CO5 | Develop Web application using JSP and Servlet, JDBC (Apply) |



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| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Data Structure and Algorithms |
| Course Code | IT12 |
| Course Credit | 3 |
| Semester | I |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Demonstrate linear data structures linked list, stack and queue (apply) |
| CO2 | Implement tree, graph, hash table and heap data structures (apply) |
| CO3 | Apply brute force and backtracking techniques (apply) |
| CO4 | Demonstrate greedy and divide-conquer approaches (apply) |
| CO5 | implement dynamic programming technique (apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--------------------------|--------------------------------------|
| Program | MCA |
| Course Full Title | Object Oriented Software Engineering |
| Course Code | IT13 |
| Course Credit | 3 |
| Semester | I |
| Internal | 25 |



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| | |
|--|---|
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Distinguish different process model for a software development. (Understand) |
| CO2 | Design software requirements specification solution for a given problem definitions of a software system. (Analyze) |
| CO3 | Apply software engineering analysis/design knowledge to suggest solutions for simulated problems (Analyze) |
| CO4 | Design user interface layout for different types of applications (Apply) |
| CO5 | Recognize and describe current trends in software engineering (Understand) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Operating Systems Concepts |
| Course Code | IT14 |
| Course Credit | 3 |
| Semester | I |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand structure of OS, process management and synchronization. (Understand) |
| CO2 | Understand multicore and multiprocessing OS. (Understand) |
| CO3 | explain Realtime and embedded OS (Understand) |
| CO4 | understand Windows and Linux OS fundamentals and administration. (Understand) |
| CO5 | solve shell scripting problems (Apply) |



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| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |
| CO5 | ✓ | | | | | ✓ | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Network Technologies |
| Course Code | IT15 |
| Course Credit | 3 |
| Semester | I |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the basic concepts of Computer Network, and principle of layering (Understand) |
| CO2 | Apply the error detection and correction techniques used in data transmission (Apply) |
| CO3 | Apply IP addressing schemes and sub netting (Apply) |
| CO4 | Understand the concept of routing protocols, Application layer protocols and Network Security (Understand) |
| CO5 | Apply the socket programming basics to create a simple chat application (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | ✓ | | | | ✓ | | ✓ | | | | |

| | |
|--------------------------|------------|
| Program | MCA |
| Course Full Title | Practicals |
| Course Code | IT11L |
| Course Credit | 5 |
| Semester | I |



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| | |
|--|---|
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Demonstrate Collection framework (Apply) |
| CO2 | Develop GUI using awt and swing (Apply) |
| CO3 | Develop Web application using JSP and Servlet, JDBC (Apply) |
| CO4 | Apply Data Structure to solve problems using JavaScript (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | ✓ | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | | | | | | | |
| CO3 | ✓ | | | ✓ | | | | ✓ | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC11 |
| Course Credit | 5 |
| Semester | I |
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Create working project using tools and techniques learnt in this semester (Create) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--------------------------|---------------|
| Program | MCA |
| Course Full Title | Open Course 1 |
| Course Code | OC11 |
| Course Credit | 1 |
| Semester | I |
| Internal | 25 |



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| | |
|--|---|
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Open Course 2 |
| Course Code | OC12 |
| Course Credit | 1 |
| Semester | I |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Soft Skill 1 |
| Course Code | SS11 |
| Course Credit | 1 |
| Semester | I |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | To improve the vocabulary of English and competency for business English. |
| CO2 | Use of language lab / English learning tools such as mobile apps like |



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| | |
|-----|---|
| | Sling etc. are also encouraged and lot of listening practice, reading and understanding exposure should be given to the students. |
| CO3 | Interested students may appear for Cambridge English exam after completion of 1st year. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

COURSE OUTCOMES MCA (2020 P) SEMESTER II

| | |
|--|--|
| Program | MCA |
| Course Full Title | Python Programming |
| Course Code | IT21 |
| Course Credit | 3 |
| Semester | II |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand Demonstrate the concepts of python and modular programming. (Understand) |
| CO2 | Apply the concepts of concurrency control in python (Apply) |
| CO3 | Solve the real-life problems using object-oriented concepts and python libraries (Apply) |
| CO4 | Demonstrate the concept of IO, Exception Handling, database (Apply) |
| CO5 | Analyze the given dataset and apply the data analysis concepts and data visualization. (Analyze) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO3 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO5 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Software Project Management |
| Course Code | IT22 |
| Course Credit | 3 |
| Semester | II |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the process of Software Project Management Framework and Apply estimation techniques. (Apply) |
| CO2 | Learn the philosophy, principles and lifecycle of an agile project. (Understand) |
| CO3 | Demonstrate Agile Teams and Tools and Apply agile project constraints and trade-offs for estimating project size and schedule (Apply) |
| CO4 | Explain Project Tracking and Interpretation of Progress Report (Understand) |
| CO5 | Analyze Problem statement and evaluate User Stories (Analyze) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | | | | | | | | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | ✓ | | |
| CO4 | ✓ | | | | | ✓ | | | | | | |
| CO5 | ✓ | ✓ | | | | ✓ | | | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Optimization Techniques |
| Course Code | MT 21 |
| Course Credit | 3 |
| Semester | II |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the role and principles of optimization techniques in business world (Understand) |



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| | |
|-----|---|
| CO2 | Demonstrate specific optimization technique for effective decision making (Apply) |
| CO3 | Apply the optimization techniques in business environments (Apply) |
| CO4 | Illustrate and infer for the business scenario (Analyze) |
| CO5 | Analyze the optimization techniques in strategic planning for optimal gain. (Analyze) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Advanced Internet Technologies |
| Course Code | IT23 |
| Course Credit | 3 |
| Semester | II |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Outline the basic concepts of Advance Internet Technologies (Understand) |
| CO2 | Design appropriate user interfaces and implements webpage based on given problem Statement (Apply) |
| CO3 | Implement concepts and methods of NodeJS (Apply) |
| CO4 | Implement concepts and methods of Angular (Apply) |
| CO5 | Build Dynamic web pages using server-side PHP programming with Database Connectivity (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO3 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO5 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Advanced DBMS |
| Course Code | IT24 |
| Course Credit | 3 |
| Semester | II |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Describe the core concepts of DBMS and various databases used in real applications (Understand) |
| CO2 | Design relational database using E-R model and normalization (Apply) |
| CO3 | Demonstrate XML database and nonprocedural structural query languages for data access (Apply) |
| CO4 | Explain concepts of Parallel, Distributed and Object-Oriented Databases and their applications (Understand) |
| CO5 | Apply transaction management, recovery management, backup and security – privacy concepts for database applications (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO3 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |
| CO5 | ✓ | ✓ | ✓ | | ✓ | | | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Practicals |
| Course Code | IT21L |
| Course Credit | 5 |
| Semester | II |
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Implement python programming concepts for solving real life problems. (Apply) |
| CO2 | Implement Advanced Internet Technologies (Apply) |



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| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |
| CO2 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC21 |
| Course Credit | 5 |
| Semester | II |
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Create working project using tools and techniques learnt in this semester (Create) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Open Course 3 |
| Course Code | OC21 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Open Course 4 |
| Course Code | OC22 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Soft Skil |
| Course Code | SS21 |
| Course Credit | 1 |
| Semester | II |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Team building , Team briefing, Role of Team leader, Conflict resolution, Methodology of Group discussions, Role Functions in Group Discussion, Improving group performance, Mock group discussions. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |



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COURSE OUTCOMES MCA (2020 P) SEMESTER III

| | |
|--|--|
| Program | MCA |
| Course Full Title | Mobile Application Development |
| Course Code | IT31 |
| Course Credit | 3 |
| Semester | III |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand Various Mobile Application Architectures. (Understand) |
| CO2 | Apply different types of widgets and Layouts. (Apply) |
| CO3 | Describe Web Services and Web Views in mobile applications. (Understand) |
| CO4 | Implement data storing and retrieval methods in android. (Apply) |
| CO5 | Demonstrate Hybrid Mobile App Framework. (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | | | |
| CO3 | ✓ | ✓ | | | | | | | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | |
| CO5 | ✓ | ✓ | ✓ | | | | | | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Data Warehousing and Data Mining |
| Course Code | IT32 |
| Course Credit | 3 |
| Semester | III |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the process of Software Project Management Framework and Apply estimation techniques. (Apply) |
| CO2 | Learn and understand techniques of preprocessing on various kinds of data (Understand) |



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| | |
|-----|---|
| CO3 | Apply association Mining and Classification Techniques on Data Sets (Apply) |
| CO4 | Apply Clustering Techniques and Web Mining on Data Sets (Apply) |
| CO5 | Understand other approaches of Data mining (Understand) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Software Testing and Quality Assurance |
| Course Code | IT 33 |
| Course Credit | 3 |
| Semester | III |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Understand the role of software quality assurance in contributing to the efficient delivery of software solutions. (Understand) |
| CO2 | Demonstrate specific software tests with well-defined objectives and targets. (Apply) |
| CO3 | Demonstrate specific software tests with well-defined objectives and targets. (Apply) |
| CO4 | Construct test strategies and plans for software testing. (Analyze) |
| CO5 | Demonstrate the usage of software testing tools for test effectiveness, efficiency and coverage (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |



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| | |
|--|---|
| Program | MCA |
| Course Full Title | Knowledge Representation and Artificial Intelligence: ML, DL |
| Course Code | IT34 |
| Course Credit | 3 |
| Semester | III |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Apply Propositional Logic for knowledge representation. (Apply) |
| CO2 | Understand basic building block of Artificial Intelligence and Knowledge Representation. (Understand) |
| CO3 | Design various models based on Machine Learning methodology (Apply) |
| CO4 | Design various models based on Deep Learning methodology (Apply) |
| CO5 | Understand various hardware and software aspect used for AI and its application. (Understand) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | ✓ | | | | |
| CO3 | ✓ | ✓ | | | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | Cloud Computing |
| Course Code | IT35 |
| Course Credit | 3 |
| Semester | III |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Describe the concepts of Cloud Computing and its Service Models& Deployment Models. (Understand) |



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| | |
|-----|--|
| CO2 | Classify the types of Virtualization. (Understand) |
| CO3 | Describe the Cloud Management and relate Cloud to SOA. (Understand) |
| CO4 | Interpret Architecture and Pharrell Programing of Cloud Computing. (Apply) |
| CO5 | Demonstrate practical implementation of Cloud computing. (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Practicals |
| Course Code | IT31L |
| Course Credit | 5 |
| Semester | III |
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Implement python programming concepts for solving real life problems. (Apply) |
| CO2 | Implement Advanced Internet Technologies (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |
| CO2 | ✓ | ✓ | | ✓ | | | ✓ | | | ✓ | | ✓ |

| | |
|--|--------------|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC31 |
| Course Credit | 5 |
| Semester | III |
| Internal | 75 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |



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| | |
|-----|--|
| CO1 | Create working project using tools and techniques learnt in this semester (Create) |
|-----|--|

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Open Course 5 |
| Course Code | OC31 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

| | |
|--|---|
| Program | MCA |
| Course Full Title | Open Course 6 |
| Course Code | OC32 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | CO1: The motive behind keeping an open course is to make students aware of current/upcoming trends in Information Technology and other domains. |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |



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DIRECTOR

| | |
|--|--|
| Program | MCA |
| Course Full Title | Soft Skill |
| Course Code | SS31 |
| Course Credit | 1 |
| Semester | III |
| Internal | 25 |
| External | NA |
| Core/Elective | Elective |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Preparing resumes & CV-Covering letter (effective usage of MSWord) Self introduction during interviews Interviews – Types of Interviews, preparing for interviews (Opening, body-answer Q, close-ask Q), Types of questions, facing interviews, reviewing performance Participating in mock interviews |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO4 | ✓ | | | | | | | | ✓ | ✓ | ✓ | ✓ |

COURSE OUTCOMES MCA (2020 P) SEMESTER IV

| | |
|--|---|
| Program | MCA |
| Course Full Title | DevOps |
| Course Code | IT41 |
| Course Credit | 3 |
| Semester | IV |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Describe the evolution of technology & timeline (Understand) |
| CO2 | Explain Introduction to various Devops platforms (Remember) |
| CO3 | Demonstrate the building components / blocks of Devops and gain an insight of the Devops Architecture. (Understand) |



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| | |
|-----|---|
| CO4 | Apply the knowledge gain about Devops approach across various domains (Apply) |
| CO5 | Build DevOps application (Apply) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |

| | |
|--|--|
| Program | MCA |
| Course Full Title | PPM and OB |
| Course Code | MB41 |
| Course Credit | 3 |
| Semester | IV |
| Internal | 25 |
| External | 50 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Describe and analyze the interactions between multiple aspects of management. (Understand) |
| CO2 | Analyze the role of planning and decision making in Organization (Analyze) |
| CO3 | Justify the role of leadership qualities, Motivation and Team Building. (Analyze) |
| CO4 | Analyze stress management and conflict management (Analyze) |
| CO5 | Describe Personality and Individual Behavior (Understand) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO1 | ✓ | | | | | | | | | | | |
| CO2 | ✓ | | | | | | | ✓ | | | | |
| CO3 | ✓ | | ✓ | ✓ | | | | | | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| CO5 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |



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| | |
|--|--|
| Program | MCA |
| Course Full Title | Mini Project |
| Course Code | ITC41 |
| Course Credit | 5 |
| Semester | IV |
| Internal | 250 |
| External | 300 |
| Core/Elective | Core |
| Course Outcomes: On successful completion of this course, the learner will be able to | |
| CO1 | Create working project using tools and techniques learnt in this semester (Create) |

| CO/PO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | |

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 DIRECTOR

PROGRAM OUTCOMES OF MBA

| | |
|---|--|
| Program | MBA (Master of Business Administration) |
| Syllabus Pattern | Revised Syllabus 2019 Pattern |
| Program Credits | 110 |
| Duration | 4 Semesters (2 years) |
| Program Outcomes: At the end of the MBA programme the learner will possess the following Program Outcome | |
| PO1 | Generic and Domain Knowledge - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues |
| PO2 | Problem Solving & Innovation - Ability to identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques. |
| PO3 | Critical Thinking - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions |
| PO4 | Effective Communication - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large |
| PO5 | Leadership and Team Work - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders. |
| PO6 | Global Orientation and Cross-Cultural Appreciation: Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management. |
| PO7 | Entrepreneurship - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses. |
| PO8 | Environment and Sustainability - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects. |
| PO9 | Social Responsiveness and Ethics - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviors & act with integrity. |
| PO10 | LifeLong Learning - Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills. |



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 DIRECTOR

COURSE OUTCOMES MBA (2019 P) SEMESTER I

| | | |
|------------|-----------------------------|--------------------------------|
| Semester I | 101 – Managerial Accounting | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO101.1 | REMEMBERING | DESCRIBE the basic concepts related to Accounting, Financial Statements, Cost Accounting, Marginal Costing, Budgetary Control and Standard Costing. |
| CO101.2 | UNDERSTANDING | EXPLAIN in detail, all the theoretical concepts taught through the syllabus. |
| CO101.3 | APPLYING | PERFORM all the necessary calculations through the relevant numerical problems. |
| CO101.4 | ANALYSING | ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation. |
| CO101.5 | EVALUATING | EVALUATE the financial impact of the decision. |
| CO101.6 | CREATING | CREATE the Financial Statement of Sole Proprietor, Cost Sheet and Budgets |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | ✓ | ✓ | | ✓ | | | | | | |
| CO3 | | | ✓ | | | | | | | ✓ |
| CO4 | | | ✓ | | | | ✓ | ✓ | | ✓ |
| CO5 | | | ✓ | | | ✓ | ✓ | | | ✓ |
| CO6 | | | | ✓ | | | ✓ | | | ✓ |



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FOUNDER SECRETARY

Dr. Aramika Singh
B.Sc., M.B.A., Ph.D., MCA (I & II)
DIRECTOR

| | | |
|-------------------|---------------------------------------|---------------------------------------|
| Semester I | 102 – Organizational Behaviour | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| COM | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO102.1 | REMEMBERING | DESCRIBE the major theories, concepts, terms, models, frameworks and research findings in the field of organizational behavior. |
| CO102.2 | UNDERSTANDING | EXPLAIN the implications of organizational behavior from the perspectives of employees, managers, leaders and the organization. |
| CO102.3 | APPLYING | MAKE USE OF the Theories, Models, Principles and Frameworks of organizational behavior in specific organizational settings |
| CO102.4 | ANALYSING | DECONSTRUCT the role of individual, groups, managers and leaders in influencing how people behave and in influencing organizational culture at large. |
| CO102.5 | EVALUATING | FORMULATE approaches to reorient individual, team, managerial and leadership behaviour in order to achieve organizational goals. |
| CO102.6 | CREATING | ELABORATE UPON the challenges in shaping organizational behavior, organizational culture and organizational change. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | | | | | | ✓ | | | | |
| CO2 | | | | | | ✓ | | ✓ | | |
| CO3 | | | | ✓ | | | | | ✓ | |
| CO4 | | ✓ | | ✓ | | | | | | |
| CO5 | | | | | ✓ | | ✓ | | | |
| CO6 | ✓ | | | | | ✓ | | | | ✓ |



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DIRECTOR

| | | |
|-------------------|---|---------------------------------------|
| Semester I | 103 – Economic Analysis for Business Decisions | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO103.1 | REMEMBERING | DEFINE the key terms in micro-economics. |
| CO103.2 | UNDERSTANDING | EXPLAIN the key terms in micro-economics, from a managerial perspective. |
| CO103.3 | APPLYING | IDENTIFY the various issues in an economics context and DEMONSTRATE their significance from the perspective of business decision making. |
| CO103.4 | ANALYSING | EXAMINE the inter-relationships between various facets of micro-economics from the perspective of a consumer, firm, industry, market, competition and business cycles. |
| CO103.5 | EVALUATING | DEVELOP critical thinking based on principles of micro-economics for informed business decision making. |
| CO103.6 | CREATING | ANTICIPATE how other firms in an industry and consumers will respond to economic decisions made by a business, and how to incorporate these responses into their own decisions. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | | |
| CO2 | | | ✓ | | | | | | | |
| CO3 | | | | | ✓ | | ✓ | | | |
| CO4 | | ✓ | | | | | ✓ | | | |
| CO5 | | ✓ | | | | | ✓ | | | ✓ |
| CO6 | | | ✓ | | | | | | | |



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| | | |
|-------------------|--|---------------------------------------|
| Semester I | 104 - Business Research Methods | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO104.1 | REMEMBERING | DEFINE various concepts & terms associated with scientific business research. |
| CO104.2 | UNDERSTANDING | EXPLAIN the terms and concepts used in all aspects of scientific business research. |
| CO104.3 | APPLYING | MAKE USE OF scientific principles of research to SOLVE contemporary business research problems. |
| CO104.4 | ANALYSING | EXAMINE the various facets of a research problem and ILLUSTRATE the relevant aspects of the research process from a data driven decision perspective. |
| CO104.5 | EVALUATING | JUDGE the suitability of alternative research designs, sampling designs, data collection instruments and data analysis options in the context of a given real-life business research problem from a data driven decision perspective. |
| CO104.6 | CREATING | FORMULATE alternative research designs, sampling designs, data collection instruments, testable hypotheses, data analysis strategies and research reports to address real-life business research problems. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ |
| CO3 | | | ✓ | ✓ | | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | ✓ | | | | | | | | |
| CO6 | | | | | ✓ | | ✓ | | | |



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| | | |
|------------|---------------------------|--------------------------------|
| Semester I | 105 - Basics of Marketing | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO105.1 | REMEMBERING | RECALL and REPRODUCE the various concepts, principles, frameworks and terms related to the function and role of marketing. |
| CO105.2 | UNDERSTANDING | DEMONSTRATE the relevance of marketing management concepts and frameworks to a new or existing business across wide variety of sectors and ILLUSTRATE the role that marketing plays in the 'tool kit' of every organizational leader and manager |
| CO105.3 | APPLYING | APPLY marketing principles and theories to the demands of marketing function and practice in contemporary real world scenarios. |
| CO105.4 | ANALYSING | EXAMINE and LIST marketing issues pertaining to segmentation, targeting and positioning, marketing environmental forces, consumer buying behavior, marketing mix and Product Life Cycle in the context of real world marketing offering (commodities, goods, services, e-products/ e-services). |
| CO105.5 | EVALUATING | EXPLAIN the interrelationships between segmentation, targeting and positioning, marketing environment, consumer buying behavior, marketing mix and Product Life Cycle with real world examples |
| CO105.6 | CREATING | DISCUSS alternative approaches to segmentation, targeting and positioning, the marketing environment, consumer buying behavior, marketing mix and Product Life Cycle in the context of real world marketing offering (commodities, goods, services, e-products/ e-services). |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | | | | | | |
| CO3 | | ✓ | | | | | ✓ | ✓ | | |
| CO4 | | | | ✓ | ✓ | | | | ✓ | |
| CO5 | | ✓ | | | | ✓ | | | | |
| CO6 | | | | | | | | | | ✓ |

C



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| | | |
|-------------------|-------------------------------|---------------------------------------|
| Semester I | 106 - Digital Business | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO106.1 | REMEMBERING | DESCRIBE the conceptual framework of e commerce, mobile commerce and social commerce. |
| CO106.2 | UNDERSTANDING | SUMMARIZE the impact of information, mobile, social, digital, IOT and related technologies on society, markets & commerce. |
| CO106.3 | APPLYING | ILLUSTRATE value creation & competitive advantage in a digital Business environment. |
| CO106.4 | ANALYSING | EXAMINE the changing role of intermediaries, changing nature of supply chain and payment systems in the online and offline world. |
| CO106.5 | EVALUATING | ELABORATE upon the various types of digital business models and OUTLINE their benefits and limitations. |
| CO106.6 | CREATING | DISCUSS the various applications of Digital Business in the present day world. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | |
| CO3 | | ✓ | ✓ | | | | | | | ✓ |
| CO4 | | | | | | ✓ | ✓ | | ✓ | |
| CO5 | ✓ | | | | ✓ | | | | | ✓ |
| CO6 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



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| | | |
|-------------------|--------------------------------------|--|
| Semester I | 107 – Management Fundamentals | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO107.1 | REMEMBERING | ENUMERATE various managerial competencies and approaches to management. |
| CO107.2 | UNDERSTANDING | EXPLAIN the role and need of Planning, Organizing, Decision Making and Controlling. |
| CO107.3 | APPLYING | MAKE USE OF the principles of goal setting and planning for simple as well as complex tasks and small projects. |
| CO107.4 | ANALYSING | COMPARE and CONTRAST various organizational structures of variety of business and not-for-profit entities in a real world context. |
| CO107.5 | EVALUATING | BUILD a list of the decision making criteria used by practicing managers, leaders and entrepreneurs in routine and non-routine decision making situations and EVALUATE and EXPLAIN the same. |
| CO107.6 | CREATING | FORMULATE and DISCUSS a basic controlling model in a real life business, startup and not-for-profit organizational context. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | ✓ | | | | |
| CO3 | | | | ✓ | ✓ | | | | | ✓ |
| CO4 | | ✓ | ✓ | | | | | | | |
| CO5 | | | | | | | ✓ | ✓ | ✓ | |
| CO6 | | | | | | | | | | |



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Dr. Anamika Singh
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DIRECTOR

| | | |
|-------------------|---|--|
| Semester I | 109 – Entrepreneurship Development | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO109.1 | REMEMBERING | DEFINE the key terms, LIST the Attributes and Characteristics of Entrepreneurs features and ENUMERATE the Factors influencing Entrepreneurship Growth. |
| CO109.2 | UNDERSTANDING | DISCUSS various theories of entrepreneurship and the entrepreneurship development ecosystem in Indian context. |
| CO109.3 | APPLYING | APPLY the theories of entrepreneurship and entrepreneurship development framework to analyze and identify entrepreneurial opportunities. |
| CO109.4 | ANALYSING | DISCRIMINATE between potential options available for entrepreneur for embarking on establishing a Start Up |
| CO109.5 | EVALUATING | EVALUATE the startup ecosystem and the entrepreneurial opportunities in light of requirements of a business plan. |
| CO109.6 | CREATING | CREATE a business plan that captures entrepreneurs and variety of entrepreneur motivations, entrepreneur culture and sectoral opportunities and financing options. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | ✓ | | | | | |
| CO3 | | ✓ | ✓ | ✓ | | ✓ | | | ✓ | ✓ |
| CO4 | | | | | | | ✓ | ✓ | | |
| CO5 | | | | | ✓ | | | | | |
| CO6 | | | | | | ✓ | | | | |



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DIRECTOR

| | | |
|-------------------|--|--|
| Semester I | 111 - Legal Aspects of Business | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO111.1 | REMEMBERING | DESCRIBE the key terms involved in each Act. |
| CO111.2 | UNDERSTANDING | SUMMARIZE the key legal provisions of each Act. |
| CO111.3 | APPLYING | ILLUSTRATE the use of the Acts in common business situations. |
| CO111.4 | ANALYSING | OUTLINE the various facets of basic case laws of each Act from a legal and managerial perspective |
| CO111.5 | EVALUATING | DEVELOP critical thinking by making judgments related to use of various provisions of the Acts in business situations |
| CO111.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ |
| CO3 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| CO4 | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | | |
| CO5 | ✓ | | | ✓ | ✓ | | | | | |
| CO6 | ✓ | | | | | | | | | |



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FOUNDER SECRETARY

Dr. Anamika Singh
B.Sc., MBA, Ph.D., MCA (I & II)
DIRECTOR

| | | |
|-------------------|---------------------------------------|---|
| Semester I | 113 - Verbal Communication Lab | Evaluation: IE (50:00) |
| 2 Credits | LTP: 0:3:1 | Generic Elective – Institute Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO113.1 | REMEMBERING | RECOGNIZE the various elements of communication, channels of communication and barriers to effective communication. |
| CO113.2 | UNDERSTANDING | EXPRESS themselves effectively in routine and special real world business interactions. |
| CO113.3 | APPLYING | DEMONSTRATE appropriate use of body language. |
| CO113.4 | ANALYSING | TAKE PART IN professional meetings, group discussions, telephonic calls, elementary interviews and public speaking activities. |
| CO113.5 | EVALUATING | APPRAISE the pros and cons of sample recorded verbal communications in a business context. |
| CO113.6 | CREATING | CREATE and DELIVER effective business presentations, using appropriate technology tools, for common business situations. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ |
| CO3 | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| CO4 | ✓ | | | | | ✓ | ✓ | ✓ | | ✓ |
| CO5 | ✓ | | | | | ✓ | | | | ✓ |
| CO6 | ✓ | | | ✓ | | ✓ | | | ✓ | ✓ |



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Dr. Anamika Singh
 B.Sc., M.B.A., Ph.D., USA-Ph.D.
 DIRECTOR

| | | |
|------------|---|------------------------------------|
| Semester I | 114 - Enterprise Analysis - Desk Research | Evaluation: IE (50:00) |
| 2 Credits | LTP: 0:3:1 | Generic Elective – Institute Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO114.1 | REMEMBERING | DESCRIBE the key historical, organizational, market related, financial, governance, leadership and social responsibility dimensions of a real world business organization. |
| CO114.2 | UNDERSTANDING | SUMMARIZE the regional, national and global footprint of a real world business organization. |
| CO114.3 | APPLYING | DEMONSTRATE the use of secondary – offline and online resources to profile a real world business organization. |
| CO114.4 | ANALYSING | ANALYSE, using tables and charts, the trends in market standing and financial performance of a real world business organization over the last 5 years. |
| CO114.5 | EVALUATING | COMPOSE a succinct summary of future plans of a real world business organization the company website, shareholders reports and other information available in the public domain. |
| CO114.6 | CREATING | IMAGINE the key challenges and opportunities for a real world business organization in the immediate future (1 to 3 years). |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | ✓ | | ✓ | |
| CO2 | | | | | | | ✓ | | | |
| CO3 | | | | ✓ | | | | ✓ | | |
| CO4 | | | | | ✓ | | | ✓ | | |
| CO5 | | | ✓ | | | ✓ | | | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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FOUNDER SECRETARY

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DIRECTOR

| | | |
|------------|----------------|------------------------------------|
| Semester I | 116 - MS Excel | Evaluation: IE (50:00) |
| 2 Credits | LTP: 0:3:1 | Generic Elective – Institute Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO116.1 | REMEMBERING | SELECT appropriate menus and functions of MS Excel to Create, Format, Import, Merge, Save, Print Spreadsheets & Charts using business data. |
| CO116.2 | UNDERSTANDING | SHOW how to do basic troubleshooting and fix mistakes most people make when working with spreadsheets. |
| CO116.3 | APPLYING | USE various functions of MS Excel, Execute pivot table analysis, common (and powerful functions), and different types of lookups (vlookup, hlookup, and index/match). |
| CO116.4 | ANALYSING | ILLUSTRATE the use of the most commonly used data-manipulation commands in MS Excel. |
| CO116.5 | EVALUATING | DERIVE insights from multiple data sources in MS EXCEL and work with it to answer relevant business questions. |
| CO116.6 | CREATING | CREATE standard Excel Templates for routine business data management and analysis activities. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | | | ✓ | | | | | | | |
| CO2 | ✓ | | | | | | | | | |
| CO3 | | | | ✓ | | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | | | | | ✓ | | | | |
| CO6 | | | | | ✓ | | | | | ✓ |



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Dr. Anamika Singh
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 DIRECTOR

| | | |
|-------------|----------------------------|--------------------------------|
| Semester II | 201 – Marketing Management | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO201.1 | REMEMBERING | DESCRIBE the key terms associated with the 4 Ps of marketing. |
| CO201.2 | UNDERSTANDING | COMPARE and CONTRAST various approaches to pricing for a real world marketing offering (commodities, goods, services, e-products/ e-services.) |
| CO201.3 | APPLYING | DEMONSTRATE an understanding of various channel options for a real world marketing offering (commodities, goods, services, e-products/ e-services.) |
| CO201.4 | ANALYSING | EXAMINE the product line of a real world marketing offering (commodities, goods, services, e-products/ e-services.) |
| CO201.5 | EVALUATING | EXPLAIN the role of various communication mix elements for a real world marketing offering (commodities, goods, services, e-products/ e-services.) |
| CO201.6 | CREATING | DESIGN a marketing plan for a real world marketing offering (commodities, goods, services, e-products/ e-services.) |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | | | ✓ | | ✓ | |
| CO3 | ✓ | | | | ✓ | | | ✓ | | ✓ |
| CO4 | | ✓ | | | | | | | ✓ | |
| CO5 | | | | ✓ | | ✓ | | ✓ | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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B.Sc., P.D., Ph.D., M.A., Ph.D.
DIRECTOR

| | | |
|-------------|----------------------------|--------------------------------|
| Semester II | 202 – Financial Management | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO202.1 | REMEMBERING | DESCRIBE the basic concepts related to Financial Management, Various techniques of Financial Statement Analysis, Working Capital, Capital Structure, Leverages and Capital Budgeting. |
| CO202.2 | UNDERSTANDING | EXPLAIN in detail all theoretical concepts throughout the syllabus |
| CO202.3 | APPLYING | PERFORM all the required calculations through relevant numerical problems. |
| CO202.4 | ANALYSING | ANALYZE the situation and <ul style="list-style-type: none"> comment on financial position of the firm estimate working capital required decide ideal capital structure evaluate various project proposals |
| CO202.5 | EVALUATING | EVALUATE impact of business decisions on Financial Statements, Working Capital, Capital Structure and Capital Budgeting of the firm |
| CO202.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | | ✓ | | | | | | | ✓ | |
| CO2 | | | ✓ | | | ✓ | | | | ✓ |
| CO3 | ✓ | | ✓ | | ✓ | | ✓ | | | |
| CO4 | | ✓ | | ✓ | | ✓ | | | ✓ | |
| CO5 | ✓ | | | | ✓ | | | ✓ | | ✓ |
| CO6 | | ✓ | ✓ | | | ✓ | ✓ | | | ✓ |



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 DIRECTOR

| | | |
|-------------|---------------------------------|--------------------------------|
| Semester II | 203 – Human Resource Management | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO203.1 | REMEMBERING | DESCRIBE the role of Human Resource Function in an Organization. |
| CO203.2 | REMEMBERING | ENUMERATE the emerging trends and practices in HRM. |
| CO203.3 | UNDERSTANDING | ILLUSTRATE the different methods of HR Acquisition and retention. |
| CO203.4 | APPLYING | DEMONSTRATE the use of different appraisal and training methods in an Organization. |
| CO203.5 | ANALYSING | OUTLINE the compensation strategies of an organization |
| CO203.6 | EVALUATING | INTERPRET the sample job descriptions and job specifications for contemporary entry level roles in real world organizations. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | | | | | | ✓ |
| CO3 | | ✓ | | | | | ✓ | | ✓ | |
| CO4 | | | | | | | | | | |
| CO5 | | | | | ✓ | ✓ | | ✓ | | |
| CO6 | | | | ✓ | | | | | | |



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DIRECTOR

| | | |
|--------------------|---|---------------------------------------|
| Semester II | 204 – Operations & Supply Chain Management | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO204.1 | REMEMBERING | DEFINE basic terms and concepts related to Production, Operations, Services, Supply Chain and Quality Management. |
| CO204.2 | UNDERSTANDING | EXPLAIN the process characteristics and their linkages with process-product matrix in a real world context. |
| CO204.3 | UNDERSTANDING | DESCRIBE the various dimensions of production planning and control and their inter-linkages with forecasting. |
| CO204.4 | APPLYING | CALCULATE inventory levels and order quantities and MAKE USE OF various inventory classification methods. |
| CO204.5 | ANALYSING | OUTLINE a typical Supply Chain Model for a product / service and ILLUSTRATE the linkages with Customer Issues, Logistic and Business Issues in a real world context. |
| CO204.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | * | | |
| CO2 | | | | | ✓ | | | | | |
| CO3 | | | * | | | ✓ | | ✓ | | |
| CO4 | | | | ✓ | | | | | ✓ | |
| CO5 | | | ✓ | | | | | | | |
| CO6 | | ✓ | | | | | ✓ | | | ✓ |



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DIRECTOR

| | | |
|--------------------|--|--|
| Semester II | 207 – Contemporary Frameworks in Management | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO207.1 | REMEMBERING | DEFINE Emotional Intelligence (EQ), IDENTIFY the benefits of emotional intelligence and RELATE the 5 Dimensions of Trait EI Model to the practice of emotional intelligence.. |
| CO207.2 | UNDERSTANDING | DESCRIBE how companies achieve transition from being good companies to great companies, and DISCUSS why and how most companies fail to make the transition. |
| CO207.3 | APPLYING | APPLY the 21 laws that make leadership work successfully to improve your leadership ability and ILLUSTRATE its positive impact on the whole organization. |
| CO207.4 | ANALYSING | EXAMINE the fundamental causes of organizational politics and team failure. |
| CO207.5 | EVALUATING | EXPLAIN the approach to being effective in attaining goals by aligning oneself to the "true north" principles based on a universal and timeless character ethic. |
| CO207.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | | ✓ | ✓ | | | ✓ | | | |
| CO3 | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ | |
| CO4 | ✓ | ✓ | | | | | ✓ | ✓ | | ✓ |
| CO5 | ✓ | | | ✓ | | ✓ | | | | ✓ |
| CO6 | ✓ | ✓ | | | | | | | ✓ | ✓ |



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Dr. Anamika Singh
B.Ed., M.A., Ph.D., M.M., P.D.M.
DIRECTOR

| | | |
|--------------------|---|--|
| Semester II | 208 - Geopolitics & World Economic Systems | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO208.1 | REMEMBERING | ENUMERATE the various elements of global economic system. |
| CO208.2 | UNDERSTANDING | EXPLAIN the role of key trade organizations in the global economic system. |
| CO208.3 | APPLYING | IDENTIFY the crucial elements of International trade laws. |
| CO208.4 | ANALYSING | ANALYSE the forces that work for and against globalization. |
| CO208.5 | EVALUATING | ASSESS the impact of the elements of the Global Economic System on the India Economy. |
| CO208.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | ✓ | |
| CO2 | | ✓ | | | | | | | | |
| CO3 | | | ✓ | ✓ | | | | | | |
| CO4 | | ✓ | | | ✓ | ✓ | | ✓ | | |
| CO5 | | | | | | | ✓ | | | |
| CO6 | | | | | | | | | | ✓ |



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B.Sc., M.B.A., Ph.D., IIM, I.D.M.
DIRECTOR

| | | |
|-------------|---|-------------------------------------|
| Semester II | 209 - Start Up and New Venture Management | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO209.1 | REMEMBERING | DESCRIBE the strategic decisions involved in establishing a startup |
| CO209.2 | UNDERSTANDING | EXPLAIN the decision making matrix of entrepreneur in establishing a startup. |
| CO209.3 | APPLYING | IDENTIFY the issues in developing a team to establish and grow a startup. |
| CO209.4 | ANALYSING | FORMULATE a go to market strategy for a startup. |
| CO209.5 | EVALUATING | DESIGN a workable funding model for a proposed startup |
| CO209.6 | CREATING | DEVELOP a convincing business plan description to communicate value of the new venture to customers, investors and other stakeholders. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | | ✓ | ✓ | | ✓ | ✓ | | |
| CO3 | | | ✓ | | | | | | | |
| CO4 | | | | | | ✓ | | | ✓ | |
| CO5 | | | | | ✓ | | | | | ✓ |
| CO6 | | | | | | | | | | |



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DIRECTOR

| | | |
|-------------|---|-------------------------------------|
| Semester II | 214 - Industry Analysis - Desk Research | Evaluation: IE (00:50) |
| 2 Credits | LTP: 0:3:1 | Generic Elective - University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO214.1 | REMEMBERING | DESCRIBE the key characteristics of the players in an industry. |
| CO214.2 | UNDERSTANDING | SUMMARIZE the management ethos and philosophy of the players in the industry. |
| CO214.3 | APPLYING | DEMONSTRATE an understanding of the regulatory forces acting on the industry. |
| CO214.4 | ANALYSING | COMPARE and CONTRAST, using tables and charts, the market and financial performance of the players in an industry |
| CO214.5 | EVALUATING | ASSESS the impact of recent developments on the industry and its key players. |
| CO214.6 | CREATING | PREDICT the future trajectory of the evolution of the industry in the immediate future (1 to 3 years). |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | | | ✓ | | | |
| CO3 | | ✓ | | | ✓ | | | ✓ | ✓ | |
| CO4 | | | | ✓ | | ✓ | | | | |
| CO5 | | | ✓ | | | | ✓ | | | |
| CO6 | | | | | | | | | | ✓ |



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 DIRECTOR

| | | |
|-------------|----------------------------|---|
| Semester II | 205MKT: Marketing Research | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO205MKT.1 | REMEMBERING | IDENTIFY and DESCRIBE the key steps involved in the marketing research process. |
| CO205MKT.2 | UNDERSTANDING | COMPARE and CONTRAST various research designs, data sources, data collection instruments, sampling methods and analytical tools and SUMMARIZE their strengths & weaknesses. |
| CO205MKT.3 | APPLYING | DEMONSTRATE an understanding of the ethical framework that market research needs to operate within. |
| CO205MKT.4 | ANALYSING | ANALYSE quantitative data and draw appropriate Inferences to address a real life marketing issue. |
| CO205MKT.5 | EVALUATING | DESIGN a market research proposal for a real life marketing research problem and EVALUATE a market research proposal. |
| CO205MKT.6 | CREATING | PLAN and UNDERTAKE qualitative or quantitative Market Research and demonstrate the ability to appropriately analyse data to resolve a real life marketing issue |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | |
| CO3 | | ✓ | ✓ | | | | | | ✓ | |
| CO4 | | ✓ | | | ✓ | ✓ | ✓ | ✓ | | ✓ |
| CO5 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| CO6 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |



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DIRECTOR

| | | |
|--------------------|----------------------------------|--|
| Semester II | 206MKT: Consumer Behavior | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO206MKT.1 | REMEMBERING | ENUMERATE social and psychological factors and their influence his/her behavior as a consumer. |
| CO206MKT.2 | UNDERSTANDING | EXPLAIN fundamental concepts associated with consumer and organizational buying behavior |
| CO206MKT.3 | APPLYING | APPLY consumer behavior concepts to real world strategic marketing management decision making |
| CO206MKT.4 | ANALYSING | ANALYSE the dynamics of human behavior and the basic factors that influence the consumer's decision process. |
| CO206MKT.5 | EVALUATING | EXPLAIN the consumer and organizational buying behavior process for a variety of products (goods/services). |
| CO206MKT.6 | CREATING | DISCUSS the use of the Internet, e-commerce & information technology with respect to the changing consumer marketplace and ELABORATE on the various aspects of the changing Indian Consumer. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | ✓ | | | | | ✓ |
| CO5 | ✓ | | ✓ | | | | | | | |
| CO6 | ✓ | | | | | | | | | |



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Dr. Anamika Singh
B.Sc., M.B.A., Ph.D., U.S.A. & D.Phil.
DIRECTOR

| | | |
|--------------------|---|--|
| Semester II | 205FIN: Financial Markets and Banking Operations | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO205FIN.1 | REMEMBERING | RECALL the structure and components of Indian financial system through banking operations & Financial Markets. |
| CO205FIN.2 | UNDERSTANDING | UNDERSTAND the concepts of financial markets, their working and importance. |
| CO205FIN.3 | APPLYING | ILLUSTRATE the working and contribution of Banks and NBFCs to the Indian Economy. |
| CO205FIN.4 | ANALYSING | ANALYZE the linkages in the Financial Markets. |
| CO205FIN.5 | EVALUATING | EXPLAIN the various banking and accounting transactions. |
| CO205FIN.6 | CREATING | DEVELOP necessary competencies expected of a finance professional. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | ✓ | |
| CO2 | | | | | | | | ✓ | | |
| CO3 | | | | | | | ✓ | | | ✓ |
| CO4 | | ✓ | | ✓ | ✓ | | | | | |
| CO5 | | | | | | ✓ | | | | |
| CO6 | | | ✓ | | | | | | | |



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Dr. Anamika Singh
B.Sc., M.A., Ph.D., D.M.A. (P.D.P.)
DIRECTOR

| | | |
|--------------------|--|--|
| Semester II | 206FIN: Personal Financial Planning | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (5C) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO206FIN.1 | REMEMBERING | UNDERSTAND the need and aspects of personal financial planning |
| CO206FIN.2 | UNDERSTANDING | Describe the investment options available to an individual |
| CO206FIN.3 | APPLYING | IDENTIFY types of risk and means of managing it |
| CO206FIN.4 | ANALYSING | DETERMINE the ways of personal tax planning |
| CO206FIN.5 | EVALUATING | EXPLAIN retirement and estate planning for an individual and design a financial plan. |
| CO206FIN.6 | CREATING | CREATE a financial plan for a variety of individuals. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | | | | | |
| CO3 | | | | | | ✓ | | | | |
| CO4 | | ✓ | | ✓ | | | ✓ | | | |
| CO5 | | | | | ✓ | | | | | |
| CO6 | | ✓ | ✓ | | | | | ✓ | ✓ | ✓ |



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Dr. Anamika Singh
B.Sc., M.A., Ph.D., M.A. (P.D.P.)
DIRECTOR

| | | |
|-------------|---|--|
| Semester II | 205HRM: Competency Based Human Resource Management System | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO205HRM.1 | REMEMBERING | DEFINE the key terms related to performance management and competency development. |
| CO205HRM.2 | UNDERSTANDING | EXPLAIN various models of competency development. |
| CO205HRM.3 | APPLYING | PRACTICE competency mapping. |
| CO205HRM.4 | ANALYSING | ANALYSE competencies required for present and potential future job roles at various levels and across variety of organizations. |
| CO205HRM.5 | EVALUATING | DESIGN and MAP their own competency and plan better and appropriate career for themselves. |
| CO205HRM.6 | CREATING | DEVELOP a customized competency model in accordance with the corporate requirements. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | ✓ | | ✓ | ✓ | ✓ | | | | ✓ | ✓ |
| CO3 | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| CO4 | ✓ | | ✓ | ✓ | | | | | ✓ | ✓ |
| CO5 | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | ✓ |
| CO6 | ✓ | | | | | | | | | ✓ |



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| | | |
|--------------------|---|---|
| Semester II | 206HRM: Employee Relations and Labour Legislations | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO206HRM.1 | REMEMBERING | SHOW awareness of important and critical issues in Employee Relations |
| CO206HRM.2 | UNDERSTANDING | INTERPRET and relate legislations governing employee relations |
| CO206HRM.3 | APPLYING | DEMONSTRATE an understanding of legislations relating to working environment. |
| CO206HRM.4 | ANALYSING | OUTLINE the role of government, society and trade union in ER |
| CO206HRM.5 | EVALUATING | EXPLAIN aspects of collective bargaining and grievance handling. |
| CO206HRM.6 | CREATING | DISCUSS the relevant provisions of various Labour Legislations. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | |
| CO2 | | | | | | | | ✓ | ✓ | |
| CO3 | ✓ | ✓ | | ✓ | | | | ✓ | | |
| CO4 | | | | ✓ | | | | ✓ | ✓ | |
| CO5 | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | |
| CO6 | ✓ | | | | ✓ | | | ✓ | | ✓ |



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DIRECTOR

| | | |
|-------------|--|---|
| Semester II | 2050SCM: Service Operations Management – I | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|---|
| CO2050SCM.1 | REMEMBERING | DESCRIBE the nature and CHARACTERISTICS of services and the services economy. |
| CO2050SCM.2 | UNDERSTANDING | DESCRIBE the service design elements of variety of services. |
| CO2050SCM.3 | APPLYING | USE service blueprinting for mapping variety of real life service processes. |
| CO2050SCM.4 | ANALYSING | ANALYSE alternative locations and sites for variety of service facilities. |
| CO2050SCM.5 | EVALUATING | JUDGE and EXPLAIN the service orientation at variety of service facilities / organizations. |
| CO2050SCM.6 | CREATING | CREATE flow process layouts for variety of services. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | ✓ | | |
| CO2 | | | | | | ✓ | | | | |
| CO3 | | | | | ✓ | | | | | |
| CO4 | | | | ✓ | | | ✓ | | ✓ | |
| CO5 | | | ✓ | | | | | | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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| | | |
|-------------|----------------------------------|---|
| Semester II | 20605CM: Supply Chain Management | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|--|
| CO20605CM.1 | REMEMBERING | DESCRIBE the key concepts of Supply Chain Management and the – driving forces in contemporary Supply Chain Management. |
| CO20605CM.1 | UNDERSTANDING | EXPLAIN the structure of modern day supply chains. |
| CO20605CM.1 | APPLYING | IDENTIFY the various flows in real world supply chains |
| CO20605CM.1 | ANALYSING | COMPARE and CONTRAST push and pull strategies in Supply Chain Management. |
| CO20605CM.1 | EVALUATING | EXPLAIN the key Operational Aspects in Supply Chain Management. |
| CO20605CM.1 | CREATING | DISCUSS the relationship between Customer Value and Supply Chain Management. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ |
| CO3 | | | ✓ | ✓ | | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | ✓ | | | | | | | | |
| CO6 | | | | | ✓ | | ✓ | | | ✓ |



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 DIRECTOR

| | | |
|-------------|---|---|
| Semester II | 205BA: Basic Business Analytics using R | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO205BA.1 | REMEMBERING | IDENTIFY opportunities for creating value using business analytics and DESCRIBE the basic concepts in Business Analytics, DATA Science and Business Intelligence. |
| CO205BA.2 | UNDERSTANDING | EXPLAIN the applications of Business Analytics in multiple business domains and scenarios. |
| CO205BA.3 | APPLYING | DEVELOP a thought process to think like a data scientist/business analyst. |
| CO205BA.4 | ANALYSING | ANALYZE data graphically by creating a variety of plots using the appropriate visualization tools of R. |
| CO205BA.5 | EVALUATING | SELECT the right functions of R for the given analytics task. |
| CO205BA.6 | CREATING | COMBINE various tools and functions of R programming language and use them in live analytical projects in multiple business domains and scenarios. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | ✓ | | | | | | | |
| CO2 | ✓ | | ✓ | | | | | | | |
| CO3 | | ✓ | ✓ | | | | | | | |
| CO4 | | | ✓ | | ✓ | | | | | |
| CO5 | | ✓ | | | | | | ✓ | | |
| CO6 | ✓ | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|-------------|--------------------|---|
| Semester II | 206BA: Data Mining | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO206BA.1 | REMEMBERING | DEFINE the key terms associated with Data Mining |
| CO206BA.2 | UNDERSTANDING | EXPLAIN the various aspects of Data |
| CO206BA.3 | APPLYING | APPLY classification models |
| CO206BA.4 | ANALYSING | ANALYSE using clustering models |
| CO206BA.5 | EVALUATING | SELECT appropriate association analysis and anomaly detection tools. |
| CO206BA.6 | CREATING | COMBINE various data mining tools and use them in live analytical projects in business scenarios. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | | | | | ✓ | | |
| CO2 | ✓ | ✓ | | | | | | | | |
| CO3 | ✓ | ✓ | ✓ | | | | ✓ | | | |
| CO4 | | | ✓ | | | | | | | |
| CO5 | ✓ | | | ✓ | | | | ✓ | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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DIRECTOR

| | | |
|--------------|---------------------------|--------------------------------|
| Semester III | 301- Strategic Management | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO301.1 | REMEMBERING | DESCRIBE the basic terms and concepts in Strategic Management. |
| CO301.2 | UNDERSTANDING | EXPLAIN the various facets of Strategic Management in a real world context. |
| CO301.3 | UNDERSTANDING | DESCRIBE the trade-offs within and across strategy formulation, implementation, appraisal. |
| CO301.4 | APPLYING | INTEGRATE the aspects of various functional areas of management to develop a strategic perspective. |
| CO301.5 | ANALYSING | EXPLAIN the nature of the problems and challenges confronted by the top management team and the approaches required to function effectively as strategists. |
| CO301.6 | CREATING | DEVELOP the capability to view the firm in its totality in the context of its environment. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | ✓ | | | |
| CO2 | | ✓ | | ✓ | | ✓ | | | | |
| CO3 | | | ✓ | ✓ | | | ✓ | | ✓ | |
| CO4 | | | | | | | | ✓ | | |
| CO5 | | | | | ✓ | | | | | |
| CO6 | | | | | | | | | | ✓ |



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 B.Sc., M.B.A., Ph.D., M.A. (Ed),
 DIRECTOR

| | | |
|--------------|-----------------------|--------------------------------|
| Semester III | 302- Decision Science | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO302.1 | REMEMBERING | DESCRIBE the concepts and models associated with Decision Science. |
| CO302.2 | UNDERSTANDING | UNDERSTAND the different decision-making tools required to achieve optimisation in business processes. |
| CO302.3 | UNDERSTANDING | APPLY appropriate decision-making approach and tools to be used in business environment. |
| CO302.4 | APPLYING | ANALYSE real life situation with constraints and examine the problems using different decision-making tools |
| CO302.5 | ANALYSING | EVALUATE the various facets of a business problem and develop problem solving ability |
| CO302.6 | CREATING | DISCUSS & propose the various applications of decision tools in the present business scenario. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | ✓ | | | | ✓ | | |
| CO2 | | | | | | ✓ | | | | |
| CO3 | | | | | | | ✓ | | ✓ | |
| CO4 | | | | | ✓ | | | | | |
| CO5 | | ✓ | | | | | | | | |
| CO6 | | | ✓ | | | | | | | ✓ |



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Dr. Anamika Singh
B.Sc., MBA, Ph.D., IMA (P) P.F.
DIRECTOR

| | | |
|---------------------|--|--|
| Semester III | 307- International Business Environment | Evaluation: IE (50:00) |
| 2 Credits | LTP: 2:0:0 | Generic Elective - University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|--|
| CO 307 .1 | REMEMBERING | Recall and Describe the key concepts of International Business Environment |
| CO 307 .2 | UNDERSTANDING | Understand the relevance of Multinational Corporations (MNCs) in global trade |
| CO 307 .3 | APPLYING | Demonstrate the significance of FDI and FPI in respect of developing economy |
| CO 307 .4 | ANALYSING | Analyze the issues related to Labor, Environmental and Global Value chain |
| CO 307 .5 | EVALUATING | Formulate and discuss the case related to various Agreements under WTO and contemporary global business environment. |
| CO 307 .6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | ✓ | ✓ | | | | | | |
| CO3 | | | | | ✓ | ✓ | | | ✓ | |
| CO4 | | | | ✓ | | | ✓ | | | |
| CO5 | | | | | | | | ✓ | | |
| CO6 | | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|--------------|----------------------------|-------------------------------------|
| Semester III | 309 – Knowledge Management | Evaluation: IE (50:00) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|--|
| CO 309 .1 | REMEMBERING | DEFINE the key terms and concepts in Knowledge Management. |
| CO 309 .2 | UNDERSTANDING | DESCRIBE the Knowledge Management cycle |
| CO 309 .3 | APPLYING | DISCUSS the types of Knowledge and its implications. |
| CO 309 .4 | ANALYSING | OUTLINE the importance of capturing knowledge elements and its structures application as a competitive advantage to business |
| CO 309 .5 | EVALUATING | EXPLAIN the human and business aspects of knowledge management. |
| CO 309 .6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | ✓ | | | | | ✓ | | ✓ |
| CO3 | | | | ✓ | ✓ | ✓ | | | | |
| CO4 | | | ✓ | | | | | | ✓ | |
| CO5 | | | | | | ✓ | | | | ✓ |
| CO6 | | | | | | | | | | ✓ |



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FOUNDER SECRETARY

Dr. Anantika Singh
B.Sc., M.A., Ph.D., M.A. (Ed.)
DIRECTOR

| | | |
|--------------|--|-------------------------------------|
| Semester III | 311-Management of Non-profit organizations | Evaluation: IE (50:00) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO311.1 | REMEMBERING | DESCRIBE the basic concepts and frameworks in the field of Non-Profit Sector & Non-Profit Organization. |
| CO311.2 | UNDERSTANDING | EXPLAIN the characteristics of Non-Profit organizations, summarizing the factors affecting development of Non-Profit organization. |
| CO311.3 | APPLYING | MAKE use of theoretical concepts, frameworks while registration process of Non-Profit Organization. |
| CO311.4 | ANALYSING | EXAMINE the role of any public policies which helps NPO in decision making. |
| CO311.5 | EVALUATING | EVALUATE the performance of Non- Profit organizations, the critical financial considerations of the Non - Profit organization. |
| CO311.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | ✓ | | ✓ |
| CO2 | | ✓ | | | | | | | | |
| CO3 | | | ✓ | | | ✓ | ✓ | | | |
| CO4 | | | | | ✓ | | | ✓ | | |
| CO5 | | | | ✓ | | | | | ✓ | |
| CO6 | | | | | | | | | | |



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DIRECTOR

| | | |
|---------------------|---|--|
| Semester III | 311-Management of Non-profit organizations | Evaluation: IE (50:00) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO311.1 | REMEMBERING | DESCRIBE the basic concepts and frameworks in the field of Non-Profit Sector & Non-Profit Organization. |
| CO311.2 | UNDERSTANDING | EXPLAIN the characteristics of Non-Profit organizations, summarizing the factors affecting development of Non-Profit organization. |
| CO311.3 | APPLYING | MAKE use of theoretical concepts, frameworks while registration process of Non-Profit Organization. |
| CO311.4 | ANALYSING | EXAMINE the role of any public policies which helps NPO in decision making. |
| CO311.5 | EVALUATING | EVALUATE the performance of Non- Profit organizations, the critical financial considerations of the Non - Profit organization. |
| CO311.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | | ✓ | | | | | | ✓ | | |
| CO3 | | | ✓ | | | ✓ | ✓ | | | |
| CO4 | | | | ✓ | | | | ✓ | | |
| CO5 | | | | | ✓ | | | | ✓ | |
| CO6 | | | | | | | | | | |



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| | | |
|---------------------|--|--|
| Semester III | 305 MKT : Sales & Distribution Management | Evaluation: IE (50:00) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO305MKT.1 | REMEMBERING | DESCRIBE the theoretical concepts related to Sales Management and Distribution Management Domain |
| CO305MKT.2 | UNDERSTANDING | UNDERSTAND the concepts, techniques and approaches required for effective decision making in the areas of Sales and Distribution. |
| CO305MKT.3 | APPLYING | APPLY the concepts related to sales and distribution management. |
| CO305MKT.4 | ANALYSING | ANALYZE the real life scenarios of sales and distribution management. |
| CO305MKT.5 | EVALUATING | EVALUATE the existing sales and distribution strategies and approaches. |
| CO305MKT.6 | CREATING | DEVELOP generate and evaluate sales and distribution strategies. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | | | | | | | | | ✓ |
| CO3 | | ✓ | ✓ | | | | ✓ | | | ✓ |
| CO4 | | ✓ | | ✓ | ✓ | ✓ | ✓ | | | ✓ |
| CO5 | | ✓ | | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| CO6 | | ✓ | ✓ | | ✓ | | | ✓ | ✓ | ✓ |



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| | | |
|---------------------|---|--|
| Semester III | 313 MKT: International Marketing | Evaluation: IE (50:00) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO313MKT.1 | REMEMBERING | ENUMERATE various terms and key concepts associated with International marketing. |
| CO313MKT.2 | UNDERSTANDING | EXPLAIN various key concepts used in all aspects of international marketing. |
| CO313MKT.3 | APPLYING | APPLY all stages in international marketing management process. |
| CO313MKT.4 | ANALYSING | EXAMINE various facets of international marketing environment and the relevant aspects of international marketing management process from a data driven decision perspective. |
| CO313MKT.5 | EVALUATING | JUDGE suitability of alternative market segmentation bases, target market selection, market entry strategies, positioning strategies and international marketing mix strategies based on Assessment of international marketing environment. |
| CO313MKT.6 | CREATING | DESIGN appropriate market segmentation, target market, market entry strategies, positioning strategies and international marketing mix strategies for business organizations. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | | |
| CO2 | ✓ | ✓ | | | | ✓ | | | | |
| CO3 | | | ✓ | ✓ | | ✓ | ✓ | ✓ | | |
| CO4 | | | | | ✓ | ✓ | | | ✓ | ✓ |
| CO5 | | | | | ✓ | ✓ | | | ✓ | ✓ |
| CO6 | | | | | ✓ | ✓ | | | | ✓ |



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DIRECTOR

| | | |
|--------------|--------------------------|---|
| Semester III | 316 :Marketing Analytics | Evaluation: IE (50:00) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO316MKT.1 | REMEMBERING | DEFINE various key concepts in Marketing Analytics |
| CO316MKT.2 | UNDERSTANDING | DESCRIBE various key concepts in Marketing Analytics |
| CO316MKT.3 | APPLYING | IDENTIFY what customers' value in a product/service, and assess what they are willing to pay for it. |
| CO316MKT.4 | ANALYSING | EXPLAIN the use of various models and frameworks to solve marketing problems using marketing data |
| CO316MKT.5 | EVALUATING | MEASURE the effectiveness of marketing efforts and key outcomes in multiple areas of Marketing. |
| CO316MKT.6 | CREATING | DESIGN a study that incorporates the key tools and techniques of Marketing Analytics |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | | | | | | | | | ✓ | |
| CO2 | ✓ | | ✓ | | | ✓ | | ✓ | | |
| CO3 | | ✓ | | ✓ | | | ✓ | | | |
| CO4 | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| CO5 | | | | | | | | | ✓ | |
| CO6 | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ |



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DIRECTOR

| | | |
|---------------------|-------------------------------------|--|
| Semester III | 304 MKT : Services Marketing | Evaluation: IE (50:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|---|
| CO304 MKT.1 | REMEMBERING | RECALL the key concepts in services marketing. |
| CO304 MKT.2 | UNDERSTANDING | EXPLAIN the role of Extended Marketing Mix in Services |
| CO304 MKT.3 | APPLYING | DEMONSTRATE the new Paradigm and Perspectives in Marketing of Services |
| CO304 MKT.4 | ANALYSING | ANALYSE the significance of services marketing in the Indian and global economy |
| CO304 MKT.5 | EVALUATING | EVALUATE Segmentation, Targeting & Positioning of Services in dynamic marketing environment |
| CO304 MKT.6 | CREATING | DEVELOP marketing mix for various services offering. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO3 | ✓ | | ✓ | | | ✓ | ✓ | | | |
| CO4 | ✓ | | | ✓ | | | | | | |
| CO5 | ✓ | | | | ✓ | | ✓ | | | |
| CO6 | ✓ | | ✓ | | | | | | | |



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DIRECTOR

| | | |
|---------------------|--|--|
| Semester III | 312 MKT: Business to Business Marketing | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|---|
| CO312 MKT.1 | REMEMBERING | DEFINE the terms and concepts related to Business to Business marketing |
| CO312 MKT.2 | UNDERSTANDING | EXPLAIN the terms and concepts used in business to business marketing |
| CO312 MKT.3 | APPLYING | IDENTIFY challenges and opportunities in Business-to-Business Marketing. |
| CO312 MKT.4 | ANALYSING | FORMULATE segmentation, targeting and positioning, consumer buying behaviour and marketing mix in the context of Business to Business marketing |
| CO312 MKT.5 | EVALUATING | DESIGN marketing mix elements considering business-to-business sales and service situations. |
| CO312 MKT.6 | CREATING | DEVELOP marketing plan for business-to-business Marketing situations. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | ✓ | ✓ | | | | |
| CO2 | ✓ | | ✓ | | | | ✓ | | ✓ | |
| CO3 | | ✓ | | ✓ | | | | ✓ | | ✓ |
| CO4 | | ✓ | | ✓ | | ✓ | | | | |
| CO5 | ✓ | | | | | | ✓ | ✓ | ✓ | ✓ |
| CO6 | | | ✓ | | ✓ | | | | | |



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| | | |
|---------------------|---|-------------------------------------|
| Semester III | 304 FIN- Advanced Financial Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core - SC - FIN - 03 |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|----------|---------------------|--|
| CO 304.1 | REMEMBERING | DESCRIBE the basic concepts in financing, investing and profit distribution in a firm |
| CO 304.2 | UNDERSTANDING | EXPLAIN theoretical concepts related to raising and use of funds and value of firm |
| CO 304.3 | APPLYING | CALCULATE values for making capital structure, investment, liquidity and dividend decisions in the financial management of a firm |
| CO 304.4 | ANALYSING | ANALYZE the options for making the right financial decisions of a firm |
| CO 304.5 | EVALUATING | ASSESS the role of financial planning, risk analysis in investments, liquidity and credit management policy of the firm on shareholder value |
| CO 304.6 | CREATING | DESIGN an appropriate financial strategy using any one or multiple concepts/ techniques learned in this course. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | ✓ | |
| CO2 | ✓ | | | | ✓ | | | | | |
| CO3 | | | ✓ | | | | | | | |
| CO4 | | ✓ | ✓ | ✓ | | | | | | |
| CO5 | | | | ✓ | | | ✓ | ✓ | | |
| CO6 | | | | | | | ✓ | | | ✓ |



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DIRECTOR

| | | |
|--------------|--|---|
| Semester III | 313 FIN: Technical Analysis of Financial Markets | Evaluation: IE (00:50) |
| 2 Credits | LTP: 0:3:1 | Subject Elective (SE) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO313FIN.1 | REMEMBERING | Remember the concepts, terminologies, frameworks, tools, techniques and theories of technical analysis taught in the syllabus. |
| CO313FIN.2 | UNDERSTANDING | UNDERSTAND the applications of technical analysis and the various types of charts and the psychology behind a pattern and its formation |
| CO313FIN.3 | APPLYING | MAKE PRACTICAL USE of the Theories, Models, Principles and Frameworks of technical analysis for estimating market prices of different securities |
| CO313FIN.4 | ANALYSING | ANALYSE AND FORECAST the market prices of securities in order to take and execute investment decisions |
| CO313FIN.5 | EVALUATING | FORMULATE an ideal portfolio of investments with a combination of wide number of securities. |
| CO313FIN.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | ✓ | | | | | | |
| CO2 | | | | | ✓ | | | | | |
| CO3 | | | ✓ | | | ✓ | ✓ | ✓ | | |
| CO4 | | ✓ | | | | ✓ | ✓ | | | |
| CO5 | ✓ | | | | | | | | | ✓ |
| CO6 | | | | | | | | | ✓ | |



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| | | |
|---------------------|--|---|
| Semester III | 320 FIN - Project Finance and Trade Finance | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:2:0 | Subject Elective (SE-II) Course – Finance Specialization |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO320.1 | REMEMBERING | DESCRIBE the concepts of Project Finance and Trade Finance. |
| CO320.2 | UNDERSTANDING | SUMMARIZE the key aspects in context with Project Finance and Trade Finance. |
| CO320.3 | APPLYING | IDENTIFY the applicability of Project Finance and Trade Finance in modern business era. |
| CO320.4 | ANALYSING | EXAMINE the risks involved in Project Finance and Trade Finance. |
| CO320.5 | EVALUATING | EVALUATE the proposal of securing finance by considering the capital structure and documentation involved. |
| CO320.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | ✓ | | | | ✓ | | ✓ |
| CO2 | ✓ | | | | ✓ | | | | ✓ | |
| CO3 | | ✓ | | ✓ | | ✓ | | | | |
| CO4 | | | ✓ | | | | ✓ | | | |
| CO5 | | | ✓ | | | | | | ✓ | |
| CO6 | | | | | | | | | | |



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DIRECTOR

| | | |
|--------------|---------------------------------|--|
| Semester III | 305 FIN – International Finance | Evaluation: IE (00:50) |
| 3 Credits | LTP : 2:1:1 | Subject Core (SC) Course – International Finance |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO305FIN.1 | REMEMBERING | Enumerate the key terms associated with international Finance. |
| CO305FIN.2 | UNDERSTANDING | Summarize the various the concepts related to regulators, financial markets, Financial Instruments, tax structures at international level. |
| CO305FIN.3 | APPLYING | Illustrate the role of international monetary systems & intermediaries in Global financial market. |
| CO305FIN.4 | ANALYSING | Inspect the various parameters of global financial market and interpret best possible international investment opportunities. |
| CO305FIN.5 | EVALUATING | Determine the various strategies to start investment or business at the international level by considering various factors of international finance. |
| CO305FIN.6 | CREATING | Formulate the investment plan or business plan by adapting international finance environment. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | ✓ | |
| CO2 | | | | | | | | ✓ | | ✓ |
| CO3 | | | | | | | ✓ | | | |
| CO4 | | ✓ | | ✓ | ✓ | | | | | |
| CO5 | | | | | | ✓ | | | | |
| CO6 | | | ✓ | | | | | | | |



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DIRECTOR

| | | |
|---------------------|------------------------------------|--|
| Semester III | 314FIN: Commodities Markets | Evaluation: IE (00:50) |
| 2 Credits | LTP: 0:3:1 | Subject Elective (SE) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO314FIN.1 | REMEMBERING | DESCRIBE the key concepts of commodities market |
| CO314FIN.2 | UNDERSTANDING | Understanding the pricing mechanism of commodity, regulatory framework and the difference between commodity and financial derivatives |
| CO314FIN.3 | APPLYING | APPLY all the required strategies and calculations of commodities trading. |
| CO314FIN.4 | ANALYSING | ANALYZE both the fundamental and technical factors that drive the commodity price movements |
| CO314FIN.5 | EVALUATING | EVALUATE the various methods and tools to detect the pulse of the markets and determine the trend in which the prices are moving. |
| CO314FIN.6 | CREATING | ADAPT the skills of commodity analysis and build their own trading strategies |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | | ✓ | ✓ | | ✓ | ✓ | | | | |
| CO3 | | | | ✓ | | | ✓ | ✓ | | |
| CO4 | | ✓ | | | | | | | ✓ | |
| CO5 | ✓ | | | | | ✓ | | | | |
| CO6 | | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|---------------------|--|--|
| Semester III | 304HRM- Strategic Human Resource Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course- Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|----------------------|---|
| CO304HRM.1 | REMEMBERING | REMEMBER the strategies adopted by HR and their implementation issues and challenges faced by the organization in national and international context. |
| CO304HRM.2 | UNDERSTANDING | Ability to UNDERSTAND and ARTICULATE the basic concepts of SHRM and link the HR strategies to the organizational business strategies. |
| CO304HRM.3 | APPLYING & ANALYZING | Ability to ANALYZE HR as an investment to the company. |
| CO304HRM.4 | EVALUATING | Ability to INTERPRET and EVALUATE the implementation of the HR strategies |
| CO304HRM.5 | CREATING | FORMULATE and provide realistic solutions to the industry by designing innovative strategies and logical decision making. |
| CO304HRM.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | | | ✓ |
| CO2 | ✓ | | ✓ | | | | | ✓ | | ✓ |
| CO3 | ✓ | ✓ | | ✓ | | ✓ | | | ✓ | ✓ |
| CO4 | ✓ | | | | | | | ✓ | | ✓ |
| CO5 | ✓ | | | | | | | ✓ | | ✓ |
| CO6 | ✓ | | | | | | ✓ | | | ✓ |



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| | | |
|---------------------|--|---|
| Semester III | 319 HRM -> Change Management & new technologies in HRM | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course - Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|------------------------|---|
| CO319 HRM.1 | REMEMBERING | DEFINE Change Management and its significance |
| CO319 HRM.2 | UNDERSTANDING | UNDERSTANDING change management model and practices |
| CO319 HRM.3 | APPLYING | APPLY Change Management in context to digital transformation |
| CO319 HRM.4 | ANALYZING & EVALUATING | EXAMINE and DETERMINE various concepts in human resource information system |
| CO319 HRM.5 | CREATING | IMPLEMENT change management in the organization. |
| CO319 HRM.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | | | | | |
| CO3 | | ✓ | | ✓ | | ✓ | | ✓ | | |
| CO4 | | | ✓ | | | | | | | ✓ |
| CO5 | | | | | ✓ | | ✓ | | ✓ | |
| CO6 | | | | | | | | | | |



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|---------------------|----------------------------------|---|
| Semester III | 315HRM : International HR | Evaluation: IE (00:50) |
| 2 Credits | LTP: 0:3:1 | Subject Elective (SE) Course - Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO315HRM.1 | REMEMBERING | IDENTIFY key perspectives of global workforce management |
| CO315HRM.2 | UNDERSTANDING | UNDERSTAND cultural aspects of International HRM |
| CO315HRM.3 | APPLYING | PREPARE HR planning for long term global staffing |
| CO315HRM.4 | ANALYZING | ILLUSTRATE steps involved in global selection of human resources |
| CO315HRM.5 | EVALUATING | FORMULATE Training and development policy for expatriate employees of an organization |
| CO315HRM.6 | CREATING | ANALYZE / COMPARE important points that needs to be included while drafting global workforce performance & development management system of an organization |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | | | | | |
| CO3 | | ✓ | | | | | | | ✓ | |
| CO4 | | | | | ✓ | | | ✓ | | |
| CO5 | | | ✓ | | | ✓ | ✓ | | | ✓ |
| CO6 | | | | ✓ | | | | | | |



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| | | |
|--------------|------------------------|--|
| Semester III | 305HRM : HR Operations | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| COM | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO305HRM.1 | REMEMBERING | DESCRIBE structure of personnel department, its policies and maintenance of employee files & records |
| CO305HRM.2 | UNDERSTANDING | LEARN drafting of communications for disciplinary actions |
| CO305HRM.3 | APPLYING | DEMONSTRATE the knowledge and calculations of bonus, gratuity, PF, ESI etc. |
| CO305HRM.4 | ANALYZING | EXPERIMENT to calculate the computation of Workmen compensation, Bonus and Gratuity as per relevant acts |
| CO305HRM.5 | EVALUATING | CALCULATE computation of Workmen compensation, Bonus and Gratuity |
| CO305HRM.6 | CREATING | FILE returns under various labour laws and prepare salary structure |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | ✓ | | | | | |
| CO2 | | ✓ | | | | | | | | |
| CO3 | | | ✓ | | | ✓ | | | ✓ | |
| CO4 | | | | ✓ | | | | ✓ | | |
| CO5 | | | | | | | | | | ✓ |
| CO6 | | | | | ✓ | | ✓ | | | |



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DIRECTOR

| | | |
|---------------------|--|---|
| Semester III | 318 HRM : Performance Management System | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO318HRM.1 | REMEMBERING | DESCRIBE key components and applicability of theories of Performance Management System. |
| CO318HRM.2 | UNDERSTANDING | DEMONSTRATE the communication skills required when managing achievement and underachievement. |
| CO318HRM.3 | APPLYING | IDENTIFY factors affecting Performance Measurement |
| CO318HRM.4 | ANALYZING | ANALYZE various tools for performance assessment |
| CO318HRM.5 | EVALUATING | COMPARE various organizational performance management systems and best practices. |
| CO318HRM.6 | CREATING | DESIGN a performance management process for an organization |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | ✓ | ✓ | | ✓ | | | | | | ✓ |
| CO3 | ✓ | | ✓ | | ✓ | | | | | ✓ |
| CO4 | ✓ | | | | | | | | | ✓ |
| CO5 | ✓ | | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO6 | ✓ | | | | | | | | | ✓ |



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(Affiliated to Savitribai Phule Pune University & Approved by AICTE)

'NAAC' Accredited with 'A' Grade

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 B.A., M.P.M., Ph.D.
 FOUNDER SECRETARY

Dr. Anamika Singh
 B.Sc., M.B.A., Ph.D., DMA (Ph.D.)
 DIRECTOR

| | | |
|--------------|-------------------------------------|---|
| Semester III | 313 OSCM- Sustainable Supply Chains | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|--|
| CO313OSCM.1 | REMEMBERING | ENUMERATE the key concepts of Sustainable Supply Chains and Sustainable Supply Chain Management |
| CO313OSCM.2 | UNDERSTANDING | DESCRIBE and DISCUSS the role and importance of sustainability and sustainable development in different types of supply chains. |
| CO313OSCM.3 | APPLYING | IDENTIFY and USE relevant established and emerging principles, frameworks and theories in sustainable logistics and supply chain management. |
| CO313OSCM.4 | ANALYZING | INTEGRATE fundamental strategies, tools and techniques to analyze and design environmentally sustainable supply chain systems. |
| CO313OSCM.5 | EVALUATING | DETERMINE the unsustainable impact of logistics activities, both individual, and in the wider context of the supply chain. |
| CO313OSCM.6 | CREATING | COMPILE the managerial challenges, and FORMULATE a structured solution to these, with clear implications for relevant stakeholders. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | ✓ | | | |
| CO2 | | | | | | ✓ | | | | |
| CO3 | | | | | ✓ | | | ✓ | | |
| CO4 | | | | ✓ | | | | | ✓ | |
| CO5 | | | ✓ | | | | | | | |
| CO6 | | ✓ | | | | | | | | ✓ |



**SINHGAD TECHNICAL EDUCATION SOCIETY'S
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DIRECTOR

| | | |
|--------------|------------------------------------|---|
| Semester III | 317 OSCM- Six Sigma for Operations | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|---|
| CO317OSCM.1 | REMEMBERING | DESCRIBE the Key Concepts and Definitions associated with Quality Management, Six Sigma and Process of Six Sigma |
| CO317OSCM.2 | UNDERSTANDING | SUMMARIZE the six-sigma philosophy along with understanding of 7 QC Tools. |
| CO317OSCM.3 | APPLYING | PREDICT the change due to Six Sigma Implementation and Application of Six Sigma tools in new settings |
| CO317OSCM.4 | ANALYZING | APPRECIATE use of Six Sigma for services performance improvement and strengthening the Organizational Structures |
| CO317OSCM.5 | EVALUATING | DECIDE control chart to use for given set of data and ROSS (Return on Six Sigma) |
| CO317OSCM.6 | CREATING | CREATING a Case for Business Models in Different Industries/Proposing a Strategy by Studying the cases of Successful Six Sigma Implementation |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | ✓ | ✓ | ✓ |
| CO2 | ✓ | ✓ | ✓ | | | | | | | |
| CO3 | | ✓ | ✓ | | | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | ✓ | | | | | ✓ | | | |
| CO6 | | | | ✓ | ✓ | | ✓ | | | |



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FOUNDER SECRETARY

Dr. Anamika Singh
M.Sc., M.A., Ph.D., M.A. (Ed.)
DIRECTOR

| | | |
|--------------|---|---|
| Semester III | 304 OSCM- Services Operations Management – II | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|---|
| CO304OSCM.1 | REMEMBERING | DEFINE the key concepts in Services Operations Management. |
| CO304OSCM.2 | UNDERSTANDING | DIFFERENTIATE between various service strategies, service quality dimensions, and customer relationships based on life time value. |
| CO304OSCM.3 | APPLYING | IDENTIFY the sources of value in a service supply relationship & three factors that drive profitability for a professional service firm |
| CO304OSCM.4 | ANALYZING | CATEGORIZE a service firm according to its stage of competitiveness. |
| CO304OSCM.5 | EVALUATING | MODIFY the Service strategies of an organization for achieving the strategic service vision. |
| CO304OSCM.6 | CREATING | SOLVE the relevant numerical in the scope of the subject. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | ✓ | | ✓ | | |
| CO2 | | | | | ✓ | | | | | |
| CO3 | | | | ✓ | | | | | ✓ | |
| CO4 | | | ✓ | | | | ✓ | | | |
| CO5 | | | | | | | | | | ✓ |
| CO6 | | ✓ | | | | | | | | |



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DIRECTOR

| | | |
|---------------------|---|--|
| Semester III | 31605CM- Operations & Service Strategy | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-------------|---------------------|--|
| CO31605CM.1 | REMEMBERING | ENUMERATE the key components of operations strategy. |
| CO31605CM.2 | UNDERSTANDING | EXPLAIN the linkages between operations strategy and competitive advantage as the basis of competitive position through superior product development, cost, quality, features. |
| CO31605CM.3 | APPLYING | ILLUSTRATE the broader context of business strategy & fit between manufacturing and operations capabilities and the business strategy |
| CO31605CM.4 | ANALYZING | EXAMINE the concepts of competitive leverage using manufacturing and operations, the fit of the various elements of manufacturing and operations, the impact of the competitive environment, and the structure of the value chain. |
| CO31605CM.5 | EVALUATING | DESIGN the operations and service strategy. |
| CO31605CM.6 | CREATING | FORMULATE an operations strategy (long-term plan) and link with operational decisions. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | ✓ |
| CO3 | | | ✓ | ✓ | | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | ✓ | | | | | | | | |
| CO6 | | | | | ✓ | | ✓ | | | |



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 B.Sc., M.A., Ph.D., U.P.A. (R.D.M.)
 DIRECTOR

| | | |
|--------------|---|---|
| Semester III | 305 BA - Machine Learning & Cognitive Intelligence using Python | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|--|
| CO305BA.1 | REMEMBERING | DEFINE the key terms in Python, Machine Learning and Cognitive Intelligence |
| CO305BA.2 | UNDERSTANDING | EXPLAIN the applications of Machine Learning in multiple business domains and scenarios |
| CO305BA.3 | APPLYING | DEVELOP a thought process to think like data scientist/business Analyst |
| CO305BA.4 | ANALYZING | ANALYSE data using supervised and unsupervised Learning Techniques |
| CO305BA.5 | EVALUATING | SELECT the right functions, arrays of Python for Machine Learning algorithms. |
| CO305BA.6 | CREATING | COMBINE various tools and functions of Python language in developing Machine Learning algorithms and use them in live analytical projects in multiple business domain and scenarios. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | ✓ | | | | | |
| CO2 | | ✓ | | ✓ | | | | | | |
| CO3 | ✓ | | ✓ | | ✓ | | | | | ✓ |
| CO4 | | ✓ | | | | | | | | ✓ |
| CO5 | ✓ | | ✓ | | | | | | | |
| CO6 | ✓ | | ✓ | | | | | | | |



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DIRECTOR

| | | |
|---------------------|---|--|
| Semester III | 316BA- Predictive Modelling using SPSS Modeler | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|--|
| CO316BA.1 | REMEMBERING | DESCRIBE what Predictive Modeling is all about and know why you would want to use it |
| CO316BA.2 | UNDERSTANDING | EXPLAIN the CRISP-DM methodology and the IBM SPSS Modeler Workbench |
| CO316BA.3 | APPLYING | Explore, Prepare, Model and Evaluate your data using IBM SPSS Modeler |
| CO316BA.4 | ANALYZING | ILLUSTRATE how to use modeling skills to make decisions |
| CO316BA.5 | EVALUATING | FORMULATE models based on trained data, test the model with historical data, and use qualifying models on live data or other historical untested data. |
| CO316BA.6 | CREATING | SOLVE real world problems using predictive modeling techniques on a realworld data set |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | | | | | | | |
| CO2 | ✓ | ✓ | ✓ | | | | | | | |
| CO3 | | | ✓ | | | | | | | |
| CO4 | | ✓ | | | | | ✓ | | | |
| CO5 | | | | ✓ | | | | | | |
| CO6 | ✓ | | | | | | | | | ✓ |



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 FOUNDER SECRETARY

Dr. Anamika Singh
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 DIRECTOR

| | | |
|--------------|---------------------------------------|---|
| Semester III | 313 BA- Industrial Internet of Things | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|--|
| CO313BA.1 | REMEMBERING | ENUMERATE the key concepts of industry 4.0, data science in manufacturing, operations analytics and IIOT |
| CO313BA.2 | UNDERSTANDING | DISCUSS the value added by analytics in the operations function. |
| CO313BA.3 | APPLYING | DEMONSTRATE the practical applications of data analytics and data science in manufacturing operations. |
| CO313BA.4 | ANALYZING | EXAMINE the Industrial Internet of Things (IIoT) and the role of Big Data Analytics. |
| CO313BA.5 | EVALUATING | EXPLAIN the applications of analytics in operations. |
| CO313BA.6 | CREATING | COMPILE the issues pertaining to the adoption of technologies that will shape industry |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | ✓ | | | | | | | |
| CO2 | | ✓ | | | | | | | | |
| CO3 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| CO4 | | | | | | ✓ | | | | |
| CO5 | | ✓ | | | | | | | | ✓ |
| CO6 | ✓ | | | | | | | | | |



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| | | |
|--------------|--|------------------------|
| Semester III | 304 IB: Import Export Documentation and Procedures | Evaluation: IE (00-50) |
| 3 Credits | LTP: 2:1:1 | Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO304IB.1 | REMEMBERING | DESCRIBE THE PROCESS OF IMPORT AND EXPORT IN THE CONTEXT OF BUSINESS |
| CO304IB.2 | UNDERSTANDING | EXPLAIN THE IMPORT AND EXPORT TRANSACTIONS, CLASSIFICATION AND VARIOUS PAYMENT TERMS |
| CO304IB.3 | APPLYING | IDENTIFY VARIOUS TYPES OF DOCUMENTS REQUIRED FOR THE PROCEDURES INVOLVED IN IMPORT AND EXPORT |
| CO304IB.4 | ANALYZING | EXAMINE VARIOUS DOCUMENTATION FORMATS FOR THE IMPORT AND EXPORT PROCESSES |
| CO304IB.5 | EVALUATING | EXPLAIN PRE AND POST ACTIVITIES OF IMPORT AND EXPORT PROCESS |
| CO304IB.6 | CREATING | DISCUSS ON VARIOUS ASPECTS OF TRADES, DOCUMENTATION AND PROCEDURES FOR IMPORT AND EXPORT |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | ✓ | | | | | | | |
| CO3 | | | | ✓ | | ✓ | ✓ | ✓ | ✓ | |
| CO4 | | | | | ✓ | | | | | |
| CO5 | | | | | | | | ✓ | | |
| CO6 | | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|--------------|---|------------------------|
| Semester III | 312 IB: Cross Cultural Management and Global Leadership | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Elective Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| COR | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO312IB.1 | REMEMBERING | DESCRIBE THE CONCEPT OF CULTURE AND SIGNIFICANCE OF CROSS-CULTURAL MANAGEMENT |
| CO312IB.2 | UNDERSTANDING | OUTLINE THE CULTURAL VALUES AND DIFFERENCES WITH DIMENSIONS OF CULTURAL NORMS AND BEHAVIORS |
| CO312IB.3 | APPLYING | IDENTIFY VARIOUS FACTORS AFFECTING CULTURE AND DECISION-MAKING MODELS ACROSS CULTURES |
| CO312IB.4 | ANALYZING | EXAMINE THEORIES OF LEADERSHIP WITH LEADERSHIP ACROSS CULTURES |
| CO312IB.5 | EVALUATING | EXPLAIN CULTURALLY INTELLIGENT LEADERSHIP IN INTERNATIONAL TRADE |
| CO312IB.6 | CREATING | DISCUSS ON LEADING AND MANAGING MULTICULTURAL TEAMS IN INTERNATIONAL CONTEXT |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | ✓ | | | | | | | |
| CO3 | | | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| CO4 | | | ✓ | | | | | ✓ | | |
| CO5 | | | | | | | ✓ | | | |
| CO6 | | | | | | | | | | ✓ |



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| | | |
|-------------|--|--------------------------------|
| Semester IV | 401 – Enterprise Performance Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO401.1 | REMEMBERING | Enumerate the different parameters & facets of management control of an enterprise. |
| CO401.2 | UNDERSTANDING | Illustrate the various techniques of enterprise performance management for varied sectors. |
| CO401.3 | UNDERSTANDING | Determine the applicability of various tools and metrics as a performance evaluation & management tools. |
| CO401.4 | APPLYING | Analyse the key financial & non-financial attributes to evaluate enterprise performance. |
| CO401.5 | ANALYZING | Formulate the various parameters to evaluate enterprise performance effectively through implementation of strategy. |
| CO401.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| CO3 | | | | | | | | ✓ | | |
| CO4 | | | | ✓ | | | | | | |
| CO5 | | | | | | | ✓ | | | ✓ |
| CO6 | | | | | | | | | | |



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Dr. Anamika Singh
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DIRECTOR

| | | |
|-------------|--------------------------------------|--------------------------------|
| Semester IV | 402 – Indian Ethos & Business Ethics | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Compulsory Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO402.1 | REMEMBERING | DESCRIBE major theories, concepts, terms, models and framework of Indian ethos and business ethics. DISCOVER the contemporary Issues in Business Ethics |
| CO402.2 | UNDERSTANDING | CLASSIFY and RECOGNIZE Karma, Karma Yoga and discover its relevance in business setting. ILLUSTRATE the business ethical decision rationale derived from Indian Heritage Scriptures. |
| CO402.3 | UNDERSTANDING | APPLY Principles, Theories, Models and Framework of Indian ethos and business ethics in order to incorporate value system in work culture and work place. |
| CO402.4 | APPLYING | DEVELOP and EXHIBIT analytical, problem solving skills, and work ethos by COMPREHENSION and PRACTICE of Indian ethos and value system |
| CO402.5 | ANALYZING | IMPLEMENT, EVALUATE, and FACILITATE ethical business behavior and promote sustainable business ecology, improve profitability, foster business relation and employee productivity |
| CO402.6 | CREATING | ELABORATE Ethical dilemmas in different business areas of marketing, HRM and Finance and ADAPT dilemma resolution interventions by referring to certain norms, theories and models of Eastern Management. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | ✓ | ✓ | |
| CO2 | | | | | | | ✓ | | | ✓ |
| CO3 | | | | | | | | | | |
| CO4 | | ✓ | | ✓ | ✓ | | | | | |
| CO5 | | | | | | ✓ | | | | |
| CO6 | | | ✓ | | | | | | | |



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Dr. Anamika Singh
B.Sc., MCA, Ph.D., JMA, J.P.M.
DIRECTOR

| | | |
|--------------------|--|--|
| Semester IV | 405 – Global Strategic Management | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|---|
| CO405.1 | REMEMBERING | Define the concept and key terms associated with the global strategic management. |
| CO405.2 | UNDERSTANDING | Describe in detail global strategic alliance, merger and acquisitions. |
| CO405.3 | UNDERSTANDING | Demonstrate various global organisation models in global strategic management context. |
| CO405.4 | APPLYING | Examine various entry and business-level strategies from global strategic management perspective. |
| CO405.5 | ANALYZING | Explain globalization, innovation, and sustainability and challenges to strategic management. |
| CO405.6 | CREATING | Design global strategies and understand their relative merits and demerits. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | | | ✓ | ✓ | | ✓ | ✓ | ✓ |
| CO2 | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | |
| CO3 | ✓ | ✓ | ✓ | | | | | | | ✓ |
| CO4 | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | |
| CO5 | ✓ | | ✓ | ✓ | | | ✓ | | | |
| CO6 | | ✓ | | | | | | | | |



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DIRECTOR

| | | |
|-------------|--|-------------------------------------|
| Semester IV | 408 – Corporate Social Responsibility & Sustainability | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Generic Elective – University Level |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| CO408.1 | REMEMBERING | Enumerate the different concepts, legislative provisions, environmental aspects, best practices, complexity, scope, reports, social framework etc. related to CSR, business ethics & sustainability development. |
| CO408.2 | UNDERSTANDING | Compare different CSR theories, cases, dimensions of Sustainability and demonstrate a multi stake holder perspective in viewing CSR, Business ethics & Sustainability issues etc. |
| CO408.3 | APPLYING | Apply the different models, theories, approaches, cases etc. for implementation & monitoring of CSR activities & Sustainability and its impact on corporate culture & society at large. |
| CO408.4 | ANALYZING | Analyze the different reports, cases, various legal issues relating to CSR, different sustainability reports and various national and global initiatives related to CSR, Business ethics & Sustainability. |
| CO408.5 | EVALUATING | Evaluate the level of commitment of different organizations to CSR, Business ethics in attaining Sustainability development & show its competitive advantages |
| CO408.6 | CREATING | Create & Implement a CSR policy in attaining Sustainability development and its impact on various stakeholders. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | | | | | |
| CO3 | ✓ | | | ✓ | | ✓ | | | ✓ | |
| CO4 | | ✓ | | | | | ✓ | ✓ | | |
| CO5 | | | | | ✓ | | | | | |
| CO6 | | | | | | | | | | ✓ |



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| | | |
|--------------------|-------------------------------|--|
| Semester IV | 403 MKT: Marketing 4.0 | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO403MKT.1 | REMEMBERING | DESCRIBE the various concepts associated with Marketing 4.0 |
| CO403MKT.1 | UNDERSTANDING | EXPLAIN the importance of 5A's in Marketing 4.0. |
| CO403MKT.1 | APPLYING | DEMONSTRATE the application of concepts of digital marketing, new productivity metrics, Human centric marketing, Omni channel marketing to the real world of digital economy |
| CO403MKT.1 | ANALYZING | DISTINGUISH between traditional and digital marketing practices in given real world context to be the effective marketers. |
| CO403MKT.1 | EVALUATING | ASSESS how Technology & connectivity has changed human life and business in the context of real-world commodities, products & services. |
| CO403MKT.1 | CREATING | DEVELOP strategies to create WOW! Moments with customer engagement |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | |
| CO3 | ✓ | ✓ | ✓ | | | ✓ | | | | |
| CO4 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| CO5 | | | | | | ✓ | ✓ | | | ✓ |
| CO6 | | | | | | ✓ | | | ✓ | ✓ |



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| | | |
|--------------------|------------------------------------|--|
| Semester IV | 404 MKT: Marketing Strategy | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO404MKT.1 | REMEMBERING | DISCOVER perspectives of market strategy. |
| CO404MKT.2 | UNDERSTANDING | UNDERSTAND the intricacies of competitive marketing situations and ways to handle each situation. |
| CO404MKT.3 | APPLYING | BUILD a market strategy through integrating concepts like product life cycle, adoption, and segmentation, branding, pricing, distribution, and market communication. |
| CO404MKT.4 | ANALYZING | ANALYSE a company's current situation through applying internal and external analyses. |
| CO404MKT.5 | EVALUATING | EXPLAIN alternative ways to measure the outcome of market strategies. |
| CO404MKT.6 | CREATING | CREATE Corporate Advantage by exploring how the scope of firms is influenced by resources that are shared across products. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CO2 | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| CO3 | ✓ | ✓ | ✓ | | | ✓ | | | | |
| CO4 | ✓ | ✓ | ✓ | ✓ | | | | | | |
| CO5 | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | | | |
| CO6 | | ✓ | | | | | ✓ | | | |



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| | | |
|-------------|------------------------------|---|
| Semester IV | 413 MKT: Retailing Analytics | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO413MKT.1 | REMEMBERING | ENUMERATE the characteristics, opportunities and challenges of New Age Retailing, Digital Consumers Dynamics, List the data required for retail analytics. |
| CO413MKT.2 | UNDERSTANDING | UNDERSTAND Consumer Buying Behavior and Trends in new age retailing |
| CO413MKT.3 | APPLYING | USE various kinds of data and tools for performing Retailing Analytics. |
| CO413MKT.4 | ANALYZING | ILLUSTRATE the use of various tools and frameworks for predictive retail Analytics. |
| CO413MKT.5 | EVALUATING | DERIVE a variety of metrics and quantify key outcomes in multiple areas of Retail. |
| CO413MKT.6 | CREATING | BUILD value for Retail and Marketing by deriving Marketing ROI metrics. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | | | ✓ | | ✓ | | | |
| CO2 | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | ✓ |
| CO3 | | | | | | | ✓ | | | |
| CO4 | | | ✓ | | ✓ | | | ✓ | | |
| CO5 | ✓ | | | ✓ | | | | | | ✓ |
| CO6 | | | | | | ✓ | | | ✓ | |



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DIRECTOR

| | | |
|-------------|--|---|
| Semester IV | 414 MKT - Marketing to Emerging Markets & Bottom of the Pyramid | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:0 | Subject Elective (SE) Course – Marketing Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO414MKT.1 | REMEMBERING | DESCRIBE the various practices and perspectives, concepts and characteristics of emerging Markets and BOP markets, its size & composition. |
| CO414MKT.2 | UNDERSTANDING | EXPLAIN Characteristics, challenges and opportunities of Emerging Markets, BOP markets and need of segmentation of BOP markets. |
| CO414MKT.3 | APPLYING | APPLY principles, BOP Protocol and Criticism of Marketing to BOP, to develop marketing decision-making skills for products and services in BOP markets. |
| CO414MKT.4 | ANALYZING | COMPARE AND CONTRAST between emerging markets, developed markets and BOP markets |
| CO414MKT.5 | EVALUATING | EVALUATE Demographic & economic scenario and Comparative Advantage of emerging market countries and next 11. |
| CO414MKT.6 | CREATING | DEVELOP Marketing strategy to Emerging Markets and elaborate four elements of BOP strategy to relate it with the BRICS Market in the context of real-world marketing offering. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | | | | | |
| CO3 | | ✓ | ✓ | | | ✓ | | ✓ | | |
| CO4 | | ✓ | ✓ | | | ✓ | ✓ | | | ✓ |
| CO5 | | ✓ | ✓ | | | ✓ | | | | |
| CO6 | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



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B.Sc., M.A., Ph.D., UGC/JRF
DIRECTOR

| | | |
|-------------|-------------------------|---|
| Semester IV | 403 FIN: Financial Laws | Evaluation: IE (00:50) |
| 3 Credits | LTP : 2:1:1 | SUBJECT CORE (SC) COURSE: Specialization – Financial Management (FIN) |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO403FIN.1 | REMEMBERING | DESCRIBE the concepts related to emerging areas of Microfinance, Small finance banks, Payment Banks, Start-Ups, SHG and Digitization and analytics |
| CO403FIN.2 | UNDERSTANDING | EXPLAIN in detail, all the theoretical concepts taught through the syllabus |
| CO403FIN.3 | APPLYING | APPLY the various theories and models of financial management in the case. |
| CO403FIN.4 | ANALYZING | ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation. |
| CO403FIN.5 | EVALUATING | EVALUATE the financial impact of the alternative on the given case. |
| CO403FIN.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | | | | | | | | |
| CO3 | | | ✓ | ✓ | | ✓ | ✓ | | ✓ | |
| CO4 | | ✓ | | | | | | | | |
| CO5 | | | | | ✓ | | | ✓ | | |
| CO6 | | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|-------------|---|---|
| Semester IV | 404 FIN Current Trends & Cases in Finance | Evaluation: IE (00:50) |
| 3 Credits | LTP : 2:1:1 | Subject Core (SC) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO404FIN.1 | REMEMBERING | DESCRIBE the concepts related to emerging areas of Microfinance, Small finance banks, Payment Banks, Start-Ups, SHG and Digitization and analytics |
| CO404FIN.2 | UNDERSTANDING | EXPLAIN in detail, all the theoretical concepts taught through the syllabus |
| CO404FIN.3 | APPLYING | APPLY the various theories and models of financial management in the case. |
| CO404FIN.4 | ANALYZING | ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation. |
| CO404FIN.5 | EVALUATING | EVALUATE the financial impact of the alternative on the given case. |
| CO404FIN.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | ✓ | . | . | | | ✓ |
| CO2 | | | | | | | ✓ | . | . | . |
| CO3 | | | | | | | | ✓ | | |
| CO4 | | ✓ | | ✓ | . | ✓ | | | | |
| CO5 | | | ✓ | | | | | | | |
| CO6 | | ✓ | ✓ | | | | | | | |



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| | | |
|--------------------|--|--|
| Semester IV | 412 FIN-Strategic Cost Management | Evaluation: IE (00:50) |
| 2 Credits | LTP : 1:1:1 | Subject Elective (SE) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO412FIN.1 | REMEMBERING | Remember the basic concepts, tools and techniques of cost management in the contemporary business environment and how it has influenced cost management |
| CO412FIN.2 | UNDERSTANDING | EXPLAIN in detail, all the theoretical concepts taught through the syllabus; differentiate between various costing techniques. |
| CO412FIN.3 | APPLYING | ILLUSTRATE contemporary management techniques and how they are used in cost management to respond to the contemporary business environment. |
| CO412FIN.4 | ANALYZING | ANALYSE the situation and decide the key cost factors / elements involved in the decision making |
| CO412FIN.5 | EVALUATING | FORMULATE new models and techniques for managing the cost strategically in any business organization. |
| CO412FIN.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | ✓ | |
| CO2 | | | | | | | | | | |
| CO3 | | | | | | ✓ | ✓ | | | |
| CO4 | | | | ✓ | | | | | | |
| CO5 | | ✓ | | | | | | | | ✓ |
| CO6 | | | ✓ | | | | | | | |



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DIRECTOR

| | | |
|-------------|-------------------------------|---|
| Semester IV | 413FIN -Rural & Micro Finance | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:0:0 | Subject Elective (SE) Course – Financial Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO413FIN.1 | REMEMBERING | DEFINE the key concepts of Microfinance and other terms associated with it. |
| CO413FIN.2 | UNDERSTANDING | EXPLAIN and UNDERSTAND the relevance of Microfinance and how its work towards rural development & growth. |
| CO413FIN.3 | APPLYING | IDENTIFY Micro Finance Models and their contribution towards, economic growth, poverty elimination, women empowerment and gender equality. |
| CO413FIN.4 | ANALYZING | ANALYZE the linkage between MFIs and Rural development |
| CO413FIN.5 | EVALUATING | EVALUATE the significance and funding Microfinance Institutions & Self-Help Group. |
| CO413FIN.6 | CREATING | FORMULATE and DISCUSS Cases related to MF (Models) & Rural development, Women Empowerment and Gender Equality. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | | | | | | |
| CO3 | | | ✓ | ✓ | | | | | | ✓ |
| CO4 | | | | | | | ✓ | ✓ | | |
| CO5 | ✓ | | | | | | | | | ✓ |
| CO6 | | ✓ | | | ✓ | ✓ | | | | |



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| | | |
|--------------------|---|---|
| Semester IV | 403 HRM - Organizational Diagnosis & Development | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (5C) Course - Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO403HRM.1 | REMEMBERING | DESCRIBE the major theories, concepts, terms, models tools and frameworks in the field of Organizational Diagnosis & Development. |
| CO403HRM.2 | UNDERSTANDING | UNDERSTAND concept of OD and 'intervention'. |
| CO403HRM.3 | APPLYING | MAKE USE of the Theories, Models, Principles and Frameworks of Organizational Diagnosis & Development in specific organizational settings. |
| CO403HRM.4 | ANALYZING | ANALYZE the external and internal environment with right tool of diagnosis and review the role of consultant in OD. |
| CO403HRM.5 | EVALUATING | IDENTIFY AND MAP an intervention to organisational need |
| CO403HRM.6 | CREATING | DESIGN the role of the consultant for an organisational issue |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | ✓ | | ✓ |
| CO2 | | ✓ | | | | | ✓ | | | |
| CO3 | | | ✓ | ✓ | | | | | ✓ | |
| CO4 | | ✓ | | | ✓ | ✓ | | | | |
| CO5 | | | | | | | | | | ✓ |
| CO6 | | | | | | | | | | ✓ |



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Dr. Anamika Singh
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DIRECTOR

| | | |
|-------------|--|--|
| Semester IV | 404 HRM: Current Trends & Cases in Human Resource Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course - Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|--|
| CO404HRM.1 | REMEMBERING | DESCRIBE the conceptual framework of Digital Disruptions and its impact on the current HR Trends |
| CO404HRM.2 | UNDERSTANDING | SUMMARIZE the impact of Current HR trends on HR Functions |
| CO404HRM.3 | APPLYING | ILLUSTRATE value creation & competitive advantage of Technology on current HR Trends |
| CO404HRM.4 | ANALYZING | EXAMINE the changing role of HR Priorities |
| CO404HRM.5 | EVALUATING | ELABORATE upon the various types of current HR Trends |
| CO404HRM.6 | CREATING | APPLY the existing Tech tools to real time HRM Challenges and offer Solutions. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | | | ✓ | | | ✓ | | |
| CO3 | | ✓ | | | | ✓ | ✓ | | ✓ | ✓ |
| CO4 | | | ✓ | | ✓ | | | | | |
| CO5 | | | | | | | | | | ✓ |
| CO6 | | | | | | | | | | |



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DIRECTOR

| | | |
|--------------------|------------------------------------|---|
| Semester IV | 409 HRM: Labour Legislation | Evaluation: IE (00:50) |
| 2 Credits | LTP : 0:3:1 | Subject Elective (SE) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO409HRM.1 | REMEMBERING | AWARENESS about foundation of labor legislation. |
| CO409HRM.2 | UNDERSTANDING | UNDERSTAND the legislation related to various labor and social laws. |
| CO409HRM.3 | APPLYING | APPLY formulas of specific laws and calculate. |
| CO409HRM.4 | ANALYZING | STUDY labor legislation and effective implementation of them through case laws. |
| CO409HRM.5 | EVALUATING | REVIEW AND UNDERSTAND different labor legislations and its amendments. |
| CO409HRM.6 | CREATING | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | |
| CO3 | | ✓ | | | | | | | | |
| CO4 | | | ✓ | ✓ | ✓ | ✓ | | ✓ | | |
| CO5 | | | | | | | ✓ | | ✓ | |
| CO6 | | | | | | | | | | ✓ |



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Dr. Anamika Singh
B.Sc., MCA, Ph.D., J.M.A. (J.D.P.)
DIRECTOR

| | | |
|--------------------|---------------------------------------|---|
| Semester IV | 412HRM : Best Practices In HRM | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Subject Elective (SE) Course – Human Resource Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|------------------------|--|
| CO412HRM.1 | REMEMBERING | DEFINE dynamic approach towards Human Resource activities and practices. |
| CO412HRM.2 | UNDERSTANDING | EXPLAIN theoretical framework for best practices |
| CO412HRM.3 | APPLYING | IDENTIFY & CLASSIFY the practices according to the industry and sub sectors of the industry. |
| CO412HRM.4 | ANALYZING & EVALUATING | COMPARE and DETERMINE various skill sets required at Human Resource Section |
| CO412HRM.5 | CREATING | PLAN a survey of various industry and DEVELOP a trend analysis of Human Resource Best Practices. |
| CO412HRM.6 | | |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | ✓ | | | | | | | | ✓ |
| CO2 | | | ✓ | | | | | | | |
| CO3 | | | | | | | ✓ | | | |
| CO4 | | | | | | ✓ | | | | ✓ |
| CO5 | | | | | ✓ | | | ✓ | | |
| CO6 | | | | | | | | | | |



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Dr. Anamika Singh
 B.Sc., M.A. Ph.D. (M.A. F.D.P.)
 DIRECTOR

| | | |
|-------------|---|---|
| Semester IV | 403 OSCM- E Supply Chains and Logistics | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|--------------|---------------------|---|
| CO403OSCM .1 | REMEMBERING | DESCRIBE the structure of modern days Logistics. |
| CO403OSCM .2 | UNDERSTANDING | EXPLAIN the key concepts of Supply Chain Management and the – driving forces in contemporary Supply Chain Management. |
| CO403OSCM .3 | APPLYING | IDENTIFY the various flows in real world supply chains and Logistics. DESCRIBE the importance of documentations. |
| CO403OSCM .4 | ANALYZING | COMPARE and CONTRAST push and pull strategies in Supply Chain Management. ANALYSE the impact of tracking system linkage in Logistics. |
| CO403OSCM .5 | EVALUATING | EXPLAIN the key Operational Aspects of E Procurement. |
| CO403OSCM .6 | CREATING | DEVELOP a framework for e-logistics |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | | ✓ | | | ✓ | | |
| CO3 | | | | | | ✓ | | | | |
| CO4 | | | | ✓ | | | ✓ | | | |
| CO5 | | | ✓ | | | | | | ✓ | |
| CO6 | | ✓ | | | | | | | | ✓ |



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DIRECTOR

| | | |
|-------------|------------------------|---|
| Semester IV | 404 O5CM- Industry 4.0 | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (SC) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|--------------|---------------------|---|
| CO404O5CM .1 | REMEMBERING | DEFINE industrial revolutions and its different aspects. |
| CO404O5CM .2 | UNDERSTANDING | EXPLAIN the role of technology pillars of Industry 4.0. |
| CO404O5CM .3 | APPLYING | DEMONSTRATE the use of data in effective decision making. |
| CO404O5CM .4 | ANALYZING | ILLUSTRATE the need of cyber physical system for sustainable competitive advantage. |
| CO404O5CM .5 | EVALUATING | EXPLAIN the challenges faced by various industries in full fledge implementation of Industry 4.0 |
| CO404O5CM .6 | CREATING | DEVELOP a framework for any organization using base of Smart Industry Readiness Index Proposed by Singapore EDB |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | ✓ |
| CO2 | ✓ | | | ✓ | | | | ✓ | ✓ | ✓ |
| CO3 | | ✓ | ✓ | | ✓ | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | ✓ | | | | | | | | |
| CO6 | | | | | ✓ | ✓ | ✓ | | | |



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DIRECTOR

| | | |
|--------------------|--|--|
| Semester IV | 410 OSCM- World Class Manufacturing | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:1:1 | Subject Elective (SE) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|--------------|---------------------|--|
| CO4100SCM .1 | REMEMBERING | DEFINE the basic terms associated with Manufacturing Excellence and World Class Manufacturing |
| CO4100SCM .2 | UNDERSTANDING | SUMMARIZE the features of various frameworks used for World Class Manufacturing |
| CO4100SCM .3 | APPLYING | IDENTIFY the challenges to manufacturing industry in the information age |
| CO4100SCM .4 | ANALYZING | ANALYZE the usage of information management tools, Material processing and handling tools. |
| CO4100SCM .5 | EVALUATING | EVALUATE the country's preparedness for World Class Manufacturing |
| CO4100SCM .6 | CREATING | ESTIMATE the performance of manufacturing firms with the measurement system to determine the readiness for World Class Manufacturing |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | ✓ | | | |
| CO2 | | | | | | ✓ | | | | |
| CO3 | | | | ✓ | | | | ✓ | | |
| CO4 | | | | | ✓ | | | | | |
| CO5 | | | ✓ | | | | | | ✓ | |
| CO6 | | ✓ | | | | | | | | ✓ |



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DIRECTOR

| | | |
|--------------------|--|--|
| Semester IV | 414 OSCM- Purchasing and Supplier Relationship Management | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:1:1 | Subject Elective (SE) Course – Operations & Supply Chain Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|--------------|---------------------|---|
| CO414OSCM .1 | REMEMBERING | DESCRIBE the Purchasing Process and its importance in organizations. |
| CO414OSCM .2 | UNDERSTANDING | Students will understand the impact of purchasing on competitive success and profitability of modern-day organizations |
| CO414OSCM .3 | APPLYING | MAKE USE OF the various Negotiation technique in the context of Purchasing process |
| CO414OSCM .4 | ANALYZING | ILLUSTRATE how Supplier evaluation and selection is done in organizations and its relationship with corporate Strategy. |
| CO414OSCM .5 | EVALUATING | EXPLAIN the importance of Performance Measurement & Evaluation in operations management. |
| CO414OSCM .6 | CREATING | BUILD A purchasing strategy for a real world situation. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | ✓ | | | | ✓ | |
| CO2 | | | | | | | ✓ | | | |
| CO3 | | | | ✓ | | ✓ | | ✓ | | |
| CO4 | | | ✓ | | | | | | | |
| CO5 | | | | | | | | | | ✓ |
| CO6 | | ✓ | | | | | | | | |



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DIRECTOR

| | | |
|--------------------|---|--|
| Semester IV | 404 BA- Artificial Intelligence in Business Applications | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Subject Core (5C) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO404BA .1 | REMEMBERING | IDENTIFY KNOWLEDGE associated and represent it by logical sequence and plan a strategy to solve given problem |
| CO404BA .2 | UNDERSTANDING | UNDERSTAND AI's fundamental concepts and methods. |
| CO404BA .3 | APPLYING | APPLY various machine learning algorithms on structured data to develop machine learning models. |
| CO404BA .4 | ANALYZING | ACQUIRE advanced Data ANALYSIS SKILLS through algorithm and search processes. |
| CO404BA .5 | EVALUATING | SELECT logical and functional process to develop the model |
| CO404BA .6 | CREATING | CREATE SOLUTIONS for various business problems using AI techniques. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | ✓ | | | | | | | |
| CO3 | | | | | ✓ | | | | | |
| CO4 | ✓ | | | | | | | | | |
| CO5 | | | | ✓ | | | | | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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DIRECTOR

| | | |
|-------------|-----------------------------------|---|
| Semester IV | 409 BA- E Commerce Analytics - II | Evaluation: IE (00:50) |
| 2 Credits | LTP: 2:1:1 | Subject Elective (SE) Course – Business Analytics |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|------------|---------------------|---|
| CO409BA .1 | REMEMBERING | DESCRIBE the key concepts in e-commerce analytics. |
| CO409BA .2 | UNDERSTANDING | DEMONSTRATE the use of analytics to drive profitability throughout the organization, and across the entire customer experience and lifecycle. |
| CO409BA .3 | APPLYING | SOLVE the unique problems in e-commerce, and transform data into better decisions and customer experiences. |
| CO409BA .4 | ANALYZING | DISCOVER high-value insights via dashboards and visualization. |
| CO409BA .5 | EVALUATING | DEVELOP analytical approaches to improve ecommerce marketing and advertising, understand customer behavior, increase conversion rates, strengthen loyalty, optimize merchandising and product mix, streamline transactions, optimize product mix, and accurately attribute sales. |
| CO409BA .6 | CREATING | FORMULATE the right analytics driven strategy for ecommerce businesses. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | ✓ | | |
| CO2 | | | ✓ | | | | | | | |
| CO3 | | ✓ | | | | | | | | |
| CO4 | | ✓ | | | | ✓ | | | | |
| CO5 | ✓ | | ✓ | | | | | | | |
| CO6 | | ✓ | | | | | | | | ✓ |



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| | | |
|--------------------|--|---|
| Semester IV | SE – RABM – 02 ICT for Agriculture Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Rural & Agri Business Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|----------|---------------------|---|
| RABM02.1 | REMEMBERING | RECALL the basic terminologies related to ICT |
| RABM02.2 | UNDERSTANDING | UNDERSTAND the use of ICT with different aspects & various issues & challenges for ICT information services |
| RABM02.3 | APPLYING | Apply the GIS Applications in micro resource mapping |
| RABM02.4 | ANALYZING | ANALYZE the different tools and techniques used under ICT in Agriculture Management |
| RABM02.5 | EVALUATING | EVALUATE the common ICT platforms for information services |
| RABM02.6 | CREATING | CHOOSE the right ICT as per the requirement of agriculture activity |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | | | | | | ✓ | | |
| CO3 | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ |
| CO4 | | ✓ | | | | ✓ | | ✓ | | |
| CO5 | | | | | | | | | | |
| CO6 | | | | | | | | | | ✓ |



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DIRECTOR

| | | |
|-------------|--|----------------------------------|
| Semester IV | SE – RABM – 05 Agri – Entrepreneurship | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Rural & Agri Business Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|----------|---------------------|---|
| RABM05.1 | REMEMBERING | DEFINE the term rural entrepreneurship and ENUMERATE factors that support women's participation in rural entrepreneurship |
| RABM05.2 | UNDERSTANDING | UNDERSTAND the Process of entrepreneurship, aims, and barriers |
| RABM05.3 | APPLYING | APPLY different ICT in Rural entrepreneurship development. |
| RABM05.4 | ANALYZING | Analyze the importance of IT in rural India and role of entrepreneur in rural development. |
| RABM05.5 | EVALUATING | EVALUATE the rural capabilities, Endowment of Skill sets and Natural resources in rural India |
| RABM05.6 | CREATING | Design the business plan, factors considering rural development & Rural BPO |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | ✓ | | | | | | | | |
| CO3 | | ✓ | | | ✓ | | ✓ | | | |
| CO4 | | | ✓ | | | ✓ | | ✓ | ✓ | |
| CO5 | | | | ✓ | | | | | | |
| CO6 | | | | | | | | | | ✓ |



**SINHGAD TECHNICAL EDUCATION SOCIETY'S
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MANAGEMENT & COMPUTER APPLICATION**

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FOUNDER SECRETARY

Dr. Anamika Singh
B.Sc., M.A., Ph.D., UGC NET
DIRECTOR

| | | |
|--------------------|--|---|
| Semester IV | SC-PHCM- 02 Pharma and Healthcare regulatory environment in India | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Pharma and Healthcare Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|----------|---------------------|---|
| PHCM02.1 | REMEMBERING | IDENTIFY various environmental factors affecting on Pharma and Healthcare industry |
| PHCM02.2 | UNDERSTANDING | UNDERSTAND various laws applicable to Pharma and Healthcare industry |
| PHCM02.3 | APPLYING | Understand the situation and identify right legal way to solve the problem. |
| PHCM02.4 | ANALYZING | ANALYSE steps involved in Intellectual Property Rights registrations |
| PHCM02.5 | EVALUATING | CHOOSE the right type of IPR as per the content and work available to protect. |
| PHCM02.6 | CREATING | Elaborate the different laws developed by constitutions to support and protect Pharma and Healthcare sector |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | | ✓ | | | | | ✓ | |
| CO3 | | ✓ | ✓ | | ✓ | ✓ | | ✓ | | |
| CO4 | | | | | | | | | | ✓ |
| CO5 | | | | | ✓ | ✓ | | ✓ | | |
| CO6 | | | | | | | | | | |



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B.Sc., BBA, Ph.D., (MBA-IPM)
DIRECTOR

| | | |
|--------------------|--|---|
| Semester IV | SE-PHCM- 06 Entrepreneurship in Pharma and Healthcare | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Pharma and Healthcare Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|----------|---------------------|---|
| PHCM06.1 | REMEMBERING | DEFINE the key terms, LIST the Attributes and Characteristics of Entrepreneurs feature and ENUMERATE the Factors influencing Entrepreneurship Growth. |
| PHCM06.2 | UNDERSTANDING | DISCUSS the various theories of entrepreneurship. |
| PHCM06.3 | APPLYING | CONSTRUCT a framework for a typical EDP for the Pharma industry |
| PHCM06.4 | ANALYZING | EXAMINE the role of Government and various support organizations in encouraging and supporting Entrepreneurship. |
| PHCM06.5 | EVALUATING | COMPOSE an inventory of possible entrepreneurial opportunities in contemporary local, regional and national the context for Pharma and Healthcare sector. |
| PHCM06.6 | CREATING | BUILD a business plan for an entrepreneurial pharma of healthcare venture. |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | |
| CO3 | | ✓ | ✓ | | | ✓ | | ✓ | | |
| CO4 | | | | ✓ | ✓ | | | | | ✓ |
| CO5 | | | | | | | ✓ | ✓ | | |
| CO6 | | | | | | | | | | ✓ |



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Dr. Anamika Singh
B.Sc., M.A., Ph.D., UVA (IITP)
DIRECTOR

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|-------------|---|------------------------------------|
| Semester IV | SC-THM-02 Tourism and Travel Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Tourism and Hospitality Management |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| THM02.1 | REMEMBERING | DEFINE the various components of the Tourism Industry & Types of Tourism |
| THM02.2 | UNDERSTANDING | UNDERSTAND basic operations of a Travel Agency & tour conduction |
| THM02.3 | APPLYING | EXECUTE theoretical knowledge to design various tour packages & work on costing for the packages |
| THM02.4 | ANALYZING | Analyze changing trends in Travel & Transport industry- Domestic & International |
| THM02.5 | EVALUATING | INTERPRET the impacts of Tourism Industry globally & practicing of EcoTourism |
| THM02.6 | CREATING | BUILD new concepts of Eco-Tourism according to customer requirements |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | | | ✓ | | | ✓ | | | ✓ | |
| CO3 | | ✓ | | | | | ✓ | ✓ | | ✓ |
| CO4 | | ✓ | | ✓ | ✓ | ✓ | | | | |
| CO5 | | | | | | | | | | |
| CO6 | | | | | | | | | ✓ | |



**BHARATI INTERNATIONAL EDUCATION SOCIETY
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Recognized with A Grade
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Dr. Anurag Singh
Vice-Chancellor
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| | | |
|--------------------|---|---|
| Semester IV | SE-THM-05 Strategic Hospitality Management | Evaluation: IE (00:50) |
| 2 Credits | TYP: 2(1:1) | Tourism and Hospitality Management |

Course Outcomes: On successful completion of the course the learner will be able to:

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|---------|---------------------|--|
| THM05.1 | REMEMBERING | DEFINE Concept & process of Strategic thinking Major Players of Hospitality & Travel Industry |
| THM05.2 | UNDERSTANDING | DISCUSS Strategic management for various organizations factors influencing strategy formulations |
| THM05.3 | APPLYING | IMPLEMENT strategies for Hotels & Travel Agents with the help of structured designs & flow charts |
| THM05.4 | ANALYZING | ANALYSE Suitable strategies for different Hospitality sectors with considerations to micro & macro environments |
| THM05.5 | EVALUATING | EVALUATE Current market scenario & suggest strategies that can be utilized for the benefits of the company |
| THM05.6 | CREATING | DEVELOP Strategies for standalone units, a chain of hotels, small and large travel agents International strategies for small & big players |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | ✓ | | | | ✓ | | | | |
| CO3 | | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | |
| CO4 | ✓ | | ✓ | | | | | | | |
| CO5 | | | | | | ✓ | | | | ✓ |
| CO6 | | | | | | | | | | ✓ |



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Dr. Anamika Singh
B.Sc., M.B.A. Ph.D., M.A. (H.D.S.)
DIRECTOR

| | | |
|--------------------|--|-------------------------------|
| Semester IV | 404 IB: Global Trade and Logistics Management | Evaluation: IE (00:50) |
| 3 Credits | LTP: 2:1:1 | Generic Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO404IB.1 | REMEMBERING | DESCRIBE THE ECONOMIC SIGNIFICANCE OF TRADE ALONG WITH THE LOGISTICS PROCESSES |
| CO404IB.2 | UNDERSTANDING | EXPLAIN INTERNATIONAL TRADE THEORIES AND APPLICATIONS IN BUSINESS |
| CO404IB.3 | APPLYING | IDENTIFY VARIOUS ENVIRONMENTAL FACTORS ASSOCIATED WITH INTERNATIONAL BUSINESS |
| CO404IB.4 | ANALYZING | EXAMINE VARIOUS MODES AND PRACTICES OF INTERNATIONAL LOGISTICS |
| CO404IB.5 | EVALUATING | EXPLAIN THE ACTIVITIES INVOLVED IN ENTIRE LOGISTICS PROCESS IN INTERNATIONAL BUSINESS |
| CO404IB.6 | CREATING | DEVELOP THE APPROPRIATE STRATEGY OF OPERATIONS FOR GLOBAL TRADE AND LOGISTICS |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | | | | | | | | |
| CO3 | | | ✓ | | ✓ | | ✓ | | | |
| CO4 | | | ✓ | ✓ | | ✓ | | | | |
| CO5 | ✓ | ✓ | | | | | | ✓ | ✓ | ✓ |
| CO6 | | | | | ✓ | | | ✓ | | ✓ |



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| | | |
|--------------------|--|-------------------------------|
| Semester IV | 410 IB: International Banking and Foreign Exchange Management | Evaluation: IE (00:50) |
| 2 Credits | LTP: 1:1:1 | Elective Core Course |

Course Outcomes: On successful completion of the course the learner will be able to

| CO# | COGNITIVE ABILITIES | COURSE OUTCOMES |
|-----------|---------------------|---|
| CO410IB.1 | REMEMBERING | DESCRIBE THE CHARACTERISTICS AND SIGNIFICANCE OF INTERNATIONAL BANKING |
| CO410IB.2 | UNDERSTANDING | EXPLAIN THE RELEVANCE OF MONEY MARKET AND MONITORY POLICY IN INTERNATIONAL BANKING |
| CO410IB.3 | APPLYING | IDENTIFY VARIOUS TYPES OF FOREIGN EXCHANGE MARKETS AND TRANSACTIONS |
| CO410IB.4 | ANALYZING | EXAMINE SUPPLY AND DEMAND VIEW OF EXCHANGE RATES IN INTERNATIONAL BUSINESS |
| CO410IB.5 | EVALUATING | EXPLAIN THE EXCHANGE RATE RISK AND EXPOSURE IN INTERNATIONAL MARKETS |
| CO410IB.6 | CREATING | DISCUSS ON LINKAGES OF INTERNATIONAL BANKING AND FOREIGN EXCHANGE WITH INTERNATIONAL BUSINESS |

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| CO1 | ✓ | | | | | | | | | |
| CO2 | ✓ | | | | | | | | ✓ | |
| CO3 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | | ✓ |
| CO4 | | ✓ | ✓ | | ✓ | | | ✓ | | |
| CO5 | | | | | | ✓ | | | | |
| CO6 | | | | | | | | | | |

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