

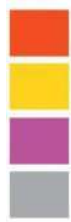
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DNYANSAGAR INSTITUTE OF MANAGEMENT & RESEARCH**

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(AISHE Code : C - 41293, PUN Code - IMMP014030)



MCA Programme : Course Outcomes (Revised Pattern 2020)			
2.6.1 Course Outcomes (CO's)			
Semester-(IT-ITL-ITC)			
Course No & Code	Course Name	Course Outcome	
IT11	Java Programming	CO1	Create working project using tools and techniques learnt in this semester
		CO2	Demonstrate CRUD Operation using MongoDB
		CO3	Design and Develop web application using Django
		CO4	ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation.
		CO5	Implement Linear data structure like stack, queue and Linked list
IT12	DATA STRUCTURE AND ALGORITHM	CO1	Understand Demonstrate the concepts of python and modular programming.
		CO2	Apply the concepts of concurrency control in python
		CO3	Solve the real-life problems using object-oriented concepts and python libraries
		CO4	Demonstrate the concept of IO, Exception Handling, database
		CO5	Analyze the given dataset and apply the data analysis concepts and data visualization.





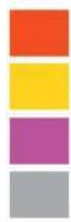
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Course No & Code	Course Name	Course Outcome	
IT13	Object Oriented Software Engineering	CO1	Understand the process of Software Project Management Framework and
		CO2	Learn the philosophy, principles and lifecycle of an agile project
		CO3	Demonstrate Agile Teams and Tools and Apply agile project constraints and trade-offs for estimating project size and schedule
		CO4	Explain Project Tracking and Interpretation of Progress Report
		CO5	Analyze Problem statement and evaluate User Stories CO1 Understand the role and principles of optimization tech
IT14	OPERATING SYSTEM CONCEPTS	CO1	Understand structure of OS, process management and synchronization.
		CO2	Understand multicore and multiprocessing OS.
		CO3	Understand basic probability concepts and rules
		CO4	explain Realtime and embedded OS
		CO5	solve shell scripting problems





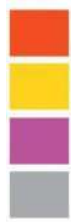
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Course No & Code	Course Name	Course Outcome	
IT15	Network Technologies	CO1	Understand the basic concepts of Computer Network, and principle of layering
		CO2	Apply the error detection and correction techniques used in data transmission
		CO3	Apply IP addressing schemes and sub netting
		CO4	Understand the concept of routing protocols, Application layer protocols and Network Security
		CO5	Apply the socket programming basics to create a simple chat application
IT11-L	PRACTICALS	CO1	Demonstrate Collection framework
		CO2	Develop GUI using awt and swing
		CO3	Develop Web application using JSP and Servlet, JDBC
		CO4	Demonstrate the concept of responsive web design and its importance
		CO5	:Apply Data Structure to solve problems using JavaScript





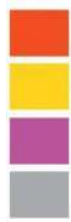
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Course No & Code	Course Name	Course Outcome	
ITC11	Mini Project	CO1	Create working project using tools and techniques learnt in this semester
		CO2	Demonstrate CRUD Operation using MongoDB.
		CO3	Design and Develop web application using Django
		CO4	Implement Linear data structure like stack, queue and Linked list and demonstrate various searching and sorting techniques
		CO5	Implement various operation of non-Linear data structure like Tree and Graph
Semester-II (IT-MT)			
IT21	Python Programming	CO1	Understand Demonstrate the concepts of python and modular programming
		CO2	Apply the concepts of concurrency control in python
		CO3	Solve the real-life problems using object-oriented concepts and python libraries
		CO4	Demonstrate the concept of IO, Exception Handling, database
		CO5	Analyze the given dataset and apply the data analysis concepts and data visualization.





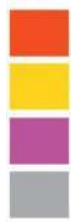
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Course No & Code	Course Name	Course Outcome	
IT-22	Software Project Management	CO1	Understand the process of Software Project Management Framework and
		CO2	Learn the philosophy, principles and lifecycle of an agile project
		CO3	Demonstrate Agile Teams and Tools and Apply agile project constraints and
		CO4	Explain Project Tracking and Interpretation of Progress Report
		CO5	Analyze Problem statement and evaluate User Stories
MT21	Optimization Techniques	CO1	Understand the role and principles of optimization techniques in business world
		CO2	Demonstrate specific optimization technique for effective decision making
		CO3	Apply the optimization techniques in business environments
		CO4	Illustrate and infer for the business scenario
		CO5	Analyze the optimization techniques in strategic planning for optimal gain
IT-23	Advanced Internet Technologies	CO1	Outline the basic concepts of Advance Internet Technologies
		CO2	Design appropriate user interfaces and implements webpage based on given
		CO3	Implement concepts and methods of NodeJS
		CO4	Implement concepts and methods of Angular
		CO5	Build Dynamic web pages using server-side PHP programming with Database Connectivity
IT-24	Advanced DBMS	CO1	Describe the core concepts of DBMS and various databases used in real applications
		CO2	Design relational database using E-R model and normalization
		CO3	IDENTIFY the crucial elements of international trade laws.
		CO4	Demonstrate XML database and nonprocedural structural query languages for data
		CO5	Apply transaction management, recovery management, backup and security – privacy concepts for database applications





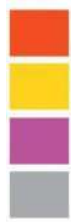
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Course No & Code	Course Name	Course Outcome	
IT-21L	Practicals	CO1	Implement Advanced Internet Technologies
		CO2	implement python programming concepts for solving real life problems.
		CO3	Implement concepts and methods of Angular
		CO4	Implement Angular services, dependency injections and Asynchronous operations
		CO5	Develop website using Next.js
ITC21	Mini Project	CO1	Create working project using tools and techniques learnt in this semester
		CO2	COMBINE Qualitative and Quantitative research approaches in a real world research project.
Semester-III (IT-ITC)			
IT-31	Mobile Application Development	CO1	Understand Data warehouse concepts, architecture and models
		CO2	Learn and understand techniques of preprocessing on various kinds of data
		CO3	Apply association Mining and Classification Techniques on Data Sets
		CO4	Apply Clustering Techniques and Web Mining on Data Sets
		CO5	Understand other approaches of Data mining





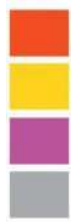
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Course No & Code	Course Name	Course Outcome	
IT-32	Data Warehousing and Data Mining	CO1	Understand Data warehouse concepts, architecture and models
		CO2	: Learn and understand techniques of preprocessing on various kinds of data
		CO3	Apply association Mining and Classification Techniques on Data Set
		CO4	Apply Clustering Techniques and Web Mining on Data Sets
		CO5	Understand other approaches of Data mining
IT-33	Software Testing and Quality Assurance	CO1	Understand the role of software quality assurance in contributing to the efficient
		CO2	Demonstrate specific software tests with well-defined objectives and targets.
		CO3	: Apply the software testing techniques in commercial environments.
		CO4	Construct test strategies and plans for software testing
		CO5	Demonstrate the usage of software testing tools for test effectiveness, efficiency and coverage





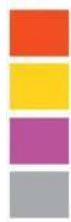
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Course No & Code	Course Name	Course Outcome	
IT34	Knowledge Representation and Artificial Intelligence: ML, DL	CO1	Understand basic building block of Artificial Intelligence and Knowledge Representation.
		CO2	: Apply Propositional Logic for knowledge representation
		CO3	Design various models based on Machine Learning methodology
		CO4	Design various models based on Deep Learning methodology
		CO5	Understand various hardware and software aspect used for AI and its application.
IT35	Cloud Computing	CO1	Describe the concepts of Cloud Computing and its Service Models& Deployment Models.
		CO2	Classify the types of Virtualization
		CO3	: Describe the Cloud Management and relate Cloud to SOA
		CO4	Interpret Architecture and Pharrell Programing of Cloud Computing
		CO5	: Demonstrate practical implementation of Cloud computing





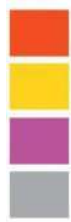
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Course No & Code	Course Name	Course Outcome	
IT-31L	Practicals	CO1	1: Develop mobile application
		CO2	DESCRIBE the various types of financial products and services.
ITC31	Mini Project	CO221MKT.1	Create working project using tools and techniques learnt in this semester
Semester-IV (IT-BM-ITC)			
IT-41	DevOps	CO1	describe the evolution of technology & timeline
		CO2	explain Introduction to various Devops platforms
		CO3	demonstrate the building components / blocks of Devops and gain an insight of the Devops Architecture
		CO4	apply the knowledge gain about Devops approach across various domains
		CO5	: build DevOps application
BM-41	PPM and OB	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 and Team Building. (
		CO4	Analyze stress management and conflict management
		CO5	Describe Personality and Individual Behavior





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Course No & Code	Course Name	Course Outcome	
ITC41	Project	CO1	Create working project using tools and techniques learnt in the programme

