Hall Ticket No: | | | | | | | | | | | Question Paper Code: 18MCAP107

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

MCA(2Yrs) I Year I Semester (R18) Regular End Semester Examinations – Jan 2019

(Regulations: R18)

OBJECT ORIENTED PROGRAMMING

Time: 3Hrs **Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either Part-A or B only

Q.1(A)	Explain all control loops available in JAVA with examples.	12M
	OR	
Q.1(B)	Define class? What is the general form of a class? Implement how objects are defined and used in a class?	12M
Q.2(A)	What are the main advantages of inheritance and Discuss the different types of inheritance briefly.	12M
	OR	
Q.2(B)	What are types of exceptions? Explain, with an example, how exception is handled in java?	12M
Q.3(A)	Define thread? Explain thread life cycle in detail?	12M
	OR	
Q.3(B)	Write short note on the following. i) FileInputStream Class ii) FileOutputStream Class iii) DataInputStream Class iv) DataOutputStream Class	12M
Q.4(A)	List out Collection Classes and Discuss Collection concept with an example program.	12M
	OR	
Q.4(B)	i) Define string and Discuss various constructors of StringTokenizer class briefly. ii) Write a Java program to demonstrate the StringTokenizer class.	6M 6M
Q.5(A)	i) What are the limitations of AWT? ii) Write a Java program to implement JLabel, JTextField, JImageicon components.	4M 8M
	OR	
Q.5(B)	Explain the adapter class with an example program.	12M

***** END*****

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(UGC-AUTONOMOUS)

MCA(2Yrs) I Year I Semester (R18) Regular End Semester Examinations – Jan 2019

(Regulations: R18)

FULL STACK WEB DEVELOPMENT

Time: 3Hrs **Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either Part-A or B only

Q.1(A)	Explain in detail about the design processes of User Experiences.	12M
	OR	
Q.1(B)	Explain the principles of SOLID Design in designing the Web Applications.	12M
Q.2(A)	Describe about the CSS3 2D and 3D transforms in the web page designing with suitable implementation example.	12M
	OR	
Q.2(B)	Explain the HTML Formatting tags with suitable examples.	12M
Q.3(A)	Explain the JavaScript Loops and Decisions constructs with examples.	12M
	OR	
Q.3(B)	What is JavaScript Function? Write a JavaScript Function for testing the given number 'N' is a Fibonacci number or not.	12M
Q.4(A)	What is ER Model? Construct and explain an ER Model for the entities Student and University.	12M
	OR	
Q.4(B)	Explain the Expressions of No SQL with suitable examples.	12M
Q.5(A)	Explain in detail about the file systems interaction in Node JS.	12M
	OR	
Q.5(B)	Write short notes on	
	i) Digest Authentication	6 M
	ii) Session Based Authentication Document Databases.	6 M

***** END*****

Hall Ticket No: | | | | | | | | | | | Question Paper Code: 18MCAP109

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

MCA(2Yrs) I Year I Semester (R18) Regular End Semester Examinations – Jan 2019

(Regulations: R18)

INTRODUCTION TO MACHINE LEARNING

Time: 3Hrs **Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either Part-A or B only

Q.1(A)	i. Define Machine learning along with schematic diagram. ii. Write any five real time applications of Machine learning.	6M 6M
	OR	
Q.1(B)	Suppose that a test for using a particular drug is 99% sensitive and 99% specific. That is, the test will produce 99% true positive results for drug users and 99% true negative results for non-drug users. Suppose that 0.5% of people are users of the drug. What is the probability that a randomly selected individual with a positive test is a drug user?	12M
Q.2(A)	Briefly discuss the issues in decision tree learning method.	12M
	OR	
Q.2(B)	How will you do the optimal separating hyperplane in kernel method? Explain in detail.	12M
Q.3(A)	How will you represent the Naïve baye's classifier in graphical model? Explain in detail.	12M
	OR	
Q.3(B)	What is Belief propagation in graphic models and how it will be used in Machine Learning?	12M
Q.4(A)	Briefly describe and give examples of each of the following approaches to clustering: partitioning methods, hierarchical methods, density-based methods, and grid-based methods.	12M
	OR	
Q.4(B)	Suppose that the data mining task is to cluster points (with x, y representing location) into three clusters, where the points are A1(2,10),A2(2,5),A3(8,4),B1(5,8),B2(7,5),B3(6,4),C1(1,2),C2(4,9) The distance function is Euclidean distance. Suppose initially we assign A1, B1, and C1 as the center of each cluster, respectively. Use the k-means algorithm to show only the three cluster centers after the first round of execution.	12M
Q.5(A)	Write the step by step procedure to implement the neural networks.	12M
	OR	
Q.5(B)	How do we practice a dataset through Artificial Neural network for agriculture sector?	12M

*** END***

Hall Ticket No: | | | | | | | | | | |

Question Paper Code: 18MCAP110

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

MCA(2Yrs) I Year I Semester (R18) Regular End Semester Examinations – Jan 2019

(Regulations: R18)

COMPUTER NETWORKS

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either Part-A or B only

Q.1(A)	i. Discuss in detail about various network topologies. ii. With a neat layer structure, explain the functioning of OSI reference models.	4M 8M
	OR	
Q.1(B)	What are the different types of transmission media? Explain briefly about guided transmission media.	12M
Q.2(A)	Explain briefly about High level data link control protocol (HDLC).	12M
	OR	
Q.2(B)	i. Write a short note on repeaters and bridges. ii. Discuss in detail about carrier sense multiple access protocol.	4M 8M
Q.3(A)	i. Write a short note on Packet switching network. ii. Discuss in detail about link state routing.	4M 8M
	OR	
Q.3(B)	Discuss in detail about IPV4 Header and IPV6 Header.	12M
Q.4(A)	i. Discuss in detail about transport layer services. ii. With a neat sketch explain TCP segment header.	6M 6M
	OR	
Q.4(B)	Discuss in detail about connection establishment and connection release in transport layer.	12M
Q.5(A)	Explain Substitution and Transposition Cipher functionalities in detail.	12M
	OR	
Q.5(B)	Demonstrate the RSA algorithm with suitable example.	12M

***** END*****

Hall Ticket No: | | | | | | | | | | | Question Paper Code: 18MBA302

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

MCA(2Yrs) I Year I Semester (R18) Regular End Semester Examinations – Jan 2019

(Regulations: R18)

INTRODUCTION TO DESIGN THINKING

Time: 3Hrs **Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either Part-A or B only

Q.1(A)	Explain the principles of design thinking.	12M
	OR	
Q.1(B)	Describe the various components of design thinking.	12M
Q.2(A)	Elaborate the decision making process.	12M
	OR	
Q.2(B)	Explain about the problem identification and empathy with suitable examples.	12M
Q.3(A)	Explain the steps involved in synthesizing and integrating the ideas.	12M
	OR	
Q.3(B)	How do you utilize the brainstorming technique for pooling ideas? Explain the steps involved in brainstorming.	12M
Q.4(A)	How do you evaluate the ideas? Explain the criterion to be used.	12M
	OR	
Q.4(B)	How is market testing helpful in launching the products? Explain the steps involved in market testing.	12M
Q.5(A)	How does design thinking helps in defining original ideas? Explain.	12M
	OR	
Q.5(B)	i) The Director of Technical Education, A.P., has been concerned about the poor academic standards and mismanagement of the affairs of XYZ Engineering College. You, as Deputy Director of Technical Education has been asked to enquire into the matter and submit a report to the Director. Write a report keeping in view the following: a. Programmes – B.Tech, EEE, ECE, ME, CE, CSE b. Admission policy c. Number of students – 2000 d. Number of teachers – 200 e. Quality of teaching f. Hostel facilities g. Facilities for games and sports h. State of discipline i. General administration j. Financial resources.	12M

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