MALLA REDDY COLLEGE OF ENGINEERING &TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

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DEPARTMENT OF INFORMATION TECHNOLOGY

III B.TECH IISEMESTER PREVIOUS QUESTION PAPERS

LIST OF SUBJECTS

CODE	NAME OF THE SUBJECT
R15A0529	CLOUD COMPUTING
R15A0514	COMPUTER NETWORKS
R15A0526	DATA WAREHOUSING AND DATA MINING
R15A0518	OBJECT ORIENTED ANALYSIS AND DESIGN
R15A0521	SOFTWARE TESTING METHODOLOGIES
R15A0573	WIRELESS NETWORK AND MOBILE COMPUTING

R15

Code No: R15A0529

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular/supplementary Examinations, April/May 2019

Cloud Computing

(IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1).	a	What is Cloud Model? Mention the types of Service Models.	**[2M]**
	b	List down the properties of cloud computing.	**[3M]**
	c	Define virtualization.	**[2M]**
	d	Give a note on Hardware Virtualization.	**[3M]**
	e	Define Cloud Provisioning?	**[2M]**
	f	What is resource provisioning?	**[3M]**
	g	What is VM provisioning?	**[2M]**
	h	Define risk management.	**[3M]**
	i	What is data security?	**[2M]**
	j	What are the information card security issues?	**[3M]**

PART-B (50 MARKS)

SECTION-I

2	Compare Public, Private and Hybrid clouds.	**[10M]**
	OR	
3	Explain about Distributed System Model and their functionalities	**[10M]**

SECTION-II

4	How does Virtualization work? What types of Virtualization are there? Explain.	**[10M]**
	OR	
5	a) What is server virtualization? Explain parallel processing.	**[10M]**

SECTION-III

6	Describe seven steps of migration.	**[10M]**
	OR	
7	Explain enterprise cloud computing.	**[10M]**

SECTION-IV

8	With a neat diagram, explain the architecture of Aneka system.	**[10M]**
	OR	
9	Explain the Live migration with Xen.	**[10M]**

SECTION-V

10	Discuss briefly (i) Security governance. (ii) Security monitoring.	**[10M]**
	OR	
11	**a)** Discuss about content level security Risk in Cloud Computing.	**[10M]**
	b) Write short notes on Google App Engine	

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Code No: R15A0514 **R15**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular/supplementary Examinations, April/May 2019

Computer Networks

(IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1). a	What is computer network?	**[2M]**
b	List out different types of networks.	**[3M]**
c	Differentiate pure ALOHA and slotted ALOHA.	**[2M]**
d	How does a router differ from bridge?	**[3M]**
e	Define flow control.	**[2M]**
f	What are the issues in routing?	**[3M]**
g	What is the count infinity problem?	**[2M]**
h	State the usage of conditional get in HTTP.	**[3M]**
i	What is the functionality of SSH?	**[3M]**
j	What is the need of security in application layer.	**[2M]**

PART-B (50 MARKS)

SECTION-I

2	a) Explain OSI Reference Model b) What is the functionality of switching?	**[6+4M]**
	OR	
3 a.	Discuss the different kinds of media.	**[5M]**
b.	What are different types of error detection techniques? Explain the CRC Detection technique using generator polynomial x^4+x^3+1 and data 11100011	**[5M]**

SECTION-II

4	a) What is the need of error detection? Explain with examples and explain methods used for error detection and error correction. b) Write the functionality of ALOHA.	**[6+4M]**
	OR	
5 a.	Explain about Spanning Tree Bridge	**[5M]**
b.	Elucidate the CSMA Schemes.	**[5M]**

SECTION-III

6 a	Elucidate Distance Vector Routing Algorithm with a example	**[5M]**

b	What is subnet? What the significance of the subnetting in the network layer.	**[5M]**

OR

7	a) Write and explain the Link state routing algorithm. b) Explain the following protocols i)DHCP ii)RARP	**[5M]+[5M]**

SECTION-IV

8	a) Draw the format of TCP packet header and explain each of its field. b) How to release the connection explain.	**[5+5M]**

OR

9	a) What is Multiplexing? List and explain three multiplexing techniques in detail. b) Write the steps in Connection Establishment in TCP	**[5+5M]**

SECTION-V

10	a) Write Short notes on i) web services ii) SNMP b) Write the RSA Algorithm.	**[5M]+[5M]**

OR

11	What is DNS? What are the services provided by DNS and explain how it works.	**[10M]**

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R15

Code No: R15A0526

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular/supplementary Examinations, April/May 2019

Data Warehousing and Data Mining

(IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1). a	List the Data warehouse Characteristics.	**[2M]**
b	What is fact table? Write its uses.	**[3M]**
c	List similarity measures.	**[2M]**
d	What is data mining?	**[3M]**
e	Define Association rule mining two step processes.	**[2M]**
f	Write the purpose of Apriori algorithm.	**[3M]**
g	Mention types of classifier techniques.	**[2M]**
h	Define information gain.	**[3M]**
i	Discuss on Agglomerative and Divisive clustering techniques.	**[2M]**
j	Mention the various types of clustering methods	**[3M]**

PART-B (50 MARKS)

SECTION-I

2	What are the various components of data warehouse? Explain their functionality in detail	**[10M]**

OR

3 a	Write the difference between designing a data warehouse and an OLAP cube.	**[5M]**
b	Make a comparison between the MOLAP and HOLAP.	**[5M]**

SECTION-II

4 a	Discuss in detail about the steps of knowledge discovery?	**[5M]**
b	Write a note on subset selection in attributes for data reduction.	**[5M]**

OR

5 a	Illustrate the Data Transformation by Normalization.	**[5M]**
b	What is the Data quality? Discuss.	**[5M]**

SECTION-III

6 a	Write FP- growth algorithm.	**[5M]**
b	Explain how association rules are generated from frequent item sets.	**[5M]**

OR

7	A database has six transactions. Let min-sup = 50% and min-conf = 75%. Find all frequent item sets using Apriori algorithm. List all the strong association rules.	**[10M]**

TID	List of items
001	Pencil, sharpener, eraser, color papers
002	Color papers, charts, glue sticks
003	Pencil, glue stick, eraser, pen
004	Oil pastels, poster colours, correction tape
005	Whitener, pen, pencil, charts, glue stick
006	Colour pencils, crayons, eraser, pen

SECTION-IV

8 a. What are the characteristics of k-nearest neighbor algorithm? **[5M]**

b. How to evaluate the classifier accuracy? **[5M]**

OR

9 a. What is Bayesian belief network? Explain in detail. **[5M]**

b. Write a note attribute selection measure. **[5M]**

SECTION-V

10 a. How to access the cluster quality? **[5M]**

b. Write partitioning around medoids algorithm **[5M]**

OR

11 a. What is the drawback of k-means algorithm? How can we modify the algorithm to diminish that problem? **[5M]**

b. What is an outlier? How is it useful?. **[5M]**

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R15

Code No: R15A0518

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)
III B.Tech II Semester Regular/supplementary Examinations, April/May 2019
Object Oriented Analysis and Design
(CSE&IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1). a	Define the some steps for, UML is artifacts of the Software Intensive System	**[2M]**
b	Give some rules of the UML	**[3M]**
c	Define Interfaces	**[2M]**
d	Discuss the Packages.	**[3M]**
e	Describe the Use cases,	**[2M]**
f	What is difference between Use Case and Actor	**[3M]**
g	Illustrate the Component	**[2M]**
h	Understand the Deployment	**[3M]**
i	Give simple steps for Activity diagram of Unified Library Application	**[2M]**
j	Give simple steps for Collaboration diagram of Unified Library Application	**[3M]**

PART-B (50 MARKS)

SECTION-I

2	Discuss about the Architecture of UML	**[10M]**
	OR	
3	Explain about the , Software Development Life Cycle.	**[10M]**

SECTION-II

4	Explain about the Advanced Classes with example	**[10M]**
	OR	
5	Explain about the Modeling Techniques for Class Diagrams	**[10M]**

SECTION-III

6	Discuss about the Use case Diagram with Example	**[10M]**
	OR	
7	Describe Activity Diagram with Example	**[10M]**

SECTION-IV

8	Explain about the Component Diagram with Example	**[10M]**
	OR	
9	Explain about the State Chart Diagrams with example	**[10M]**

SECTION-V

10	Draw and Explain the Sequence Diagram for Unified Library Application	**[10M]**
	OR	
11	Draw and Explain the State Chart Diagram for Unified Library Application	**[10M]**

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Code No: **R15A0521** **R15**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular/supplementary Examinations, April/May 2019

Software Testing Methodologies

(CSE & IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1). a	What is testing?	**[2M]**
b	Explain about the Purpose of Testing.	**[3M]**
c	Define control Flow graph	**[2M]**
d	Define Path Testing	**[3M]**
e	Illustrate the Transaction flows	**[2M]**
f	List out the transaction flow testing techniques	**[3M]**
g	Define a path.	**[2M]**
h	What is difference between Path products & Path expression	**[3M]**
i	Define a State.	**[2M]**
j	Explain about the State Graph	**[3M]**

PART-B (50 MARKS)

SECTION-I

2	Explain about the consequences of bugs.	**[10M]**
	OR	
3	Discuss about the model for testing	**[10M]**

SECTION-II

4	Discuss about the Basics concepts of path testing	**[10M]**
	OR	
5	Discuss about the path instrumentation.	**[10M]**

SECTION-III

6	Explain about the Basics of dataflow testing	**[10M]**
	OR	
7	Discuss about the strategies in dataflow testing	**[10M]**

SECTION-IV

8	What is difference between Path products & path expressions	**[10M]**
	OR	
9	Illustrate the Node Reduction Procedure	**[10M]**

SECTION-V

10	Explain about the good & bad state graph	**[10M]**
	OR	
11	Describe the State testing and Testability tips.	**[10M]**

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Code No: R15A0573 **R15**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Regular/supplementary Examinations, April/May 2019

Wireless Network and Mobile Computing

(IT)

Roll No										

Time: 3 hours **Max. Marks: 75**

Note: This question paper contains two parts A and B
Part A is compulsory which carriers 25 marks and Answer all questions.
Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART-A (25 Marks)

1). a	List some mobile services provided by GSM.	**[2M]**
b	Differentiate Infrared vs Radio transmission	**[3M]**
c	How a MACAW Protocol works?	**[2M]**
d	Explain tunneling and encapsulation in Mobile IP Network Layer	**[3M]**
e	Define Snooping TCP.	**[2M]**
f	List and explain few database issues in Mobile Transport Layer	**[3M]**
g	Define data dissemination broadcast models.	**[2M]**
h	Demonstrate data synchronization	**[3M]**
i	List any two routing algorithms	**[2M]**
j	What are the advantages of DSR?	**[3M]**

PART-B (50 MARKS)

SECTION-I

2	Discuss in detail about the following (A) HIPERLAN (B) Localization and Calling in GSM	**[10M]**
	OR	
3	Discuss GSM network architecture in detail with a neat diagram	**[10M]**

SECTION-II

4	a) Explain the use of multiple carriers by orthogonal coding? How a FDMA system does is different from a CDMA system?	**[5M]**
	b) Explain how registration of a mobile node is carried out with appropriate request and reply packet formats.	**[5M]**
	OR	
5	a) What are the differences in SDMA, TDMA, FDMA, and CDMA?	**[6M]**
	b) Explain in brief about DHCP.	**[4M]**

SECTION-III

6	a) Describe mobile TCP. How does a supervisory host send TCP pockets to mobile node and to fixed connection?	**[6M]**
	b) Draw and explain four-tier client-server architecture?	**[4M]**

OR

7	a) Compare and contrast indirect TCP, snooping TCP, and mobile TCP	**[6M]**
	b) Explain data recovery process?	**[4M]**

SECTION-IV

8	a) Describe push-based data-delivery mechanism. What are the advantages of pull-based data-delivery?	**[7M]**
	b) Compare flat-disk, skewed-disk and multi-disk broadcast models	**[3M]**

OR

9	a) Explain classification of data delivery mechanism.	**[5M]**
	b) Discuss in brief about DAB and DVB.	**[5M]**

SECTION-V

10	a) Explain security threats in MANETS?	**[4M]**
	b) Explain the working process of Ad hoc On-Demand Distance Vector (AODV) routing algorithm.	**[6M]**

OR

11	a) Explain the working process of Destination Sequence Distance Vector (DSDV) routing algorithm.	**[6M]**
	b) Discuss in detail about WAP.	**[4M]**

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