(From the academic session 2020-21)

MCA: SEMESTER-III

## **SUBJECT:** System Simulation

(MCA-31) Assignment-I

Note:	Attempt any five	questions in all	l. First questior	n is compulsory. A	ll questions	carry
	equal marks.					

equal marks.		Max. Marks: 15
Q1. A) What is system Simu	lation?	ivida. Ividi RS. 13
B) Modeling		
C) Simulation Software		
	Unit 1	
Q2 what is Simulation? Defi	ne type of simulation	
	Or	
Advantage and disadvantage	of simulation study	
	Unit 2	
Q.3 Explain Various method	s of generating random variables	
	Or	
Define simulation of single serv	ver system	
	Unit 3	
Q.4 Basic concept of queuing t	theory.	
	Or	
Discus general queuing syste	ems	
	Unit 4	
Q.5 Factors in selection of disc	crete system simulation languages	
Or		
Explain Simulation of compu	ter systems	

(From the academic session 2020-21)

MCA SEMESTER-III

**SUBJECT:** System Simulation (MCA-31) **Assignment-II** 

Note: Attempt any five questions in all. First question is compulsory. All questions carry

equal marks. Max. Marks: 15 Q1.a) Explain General system theory b) Pseudo random numbers c) SIMSCRIPT Unit 1 Q2. Simulation as a decision making tool Or Steps in simulation study Unit 2 Q.3 Discuss discrete system simulation language Or Explain the classification of discrete system simulation language Unit 3 Q.4 Define time flow mechanism Or Short note on data collection and reduction Unit 4 Q.5 Comparison and selection of simulation languages

Or

Explain GPSS, SIMULA

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MCA SEMESTER-III

# SUBJECT: Computer Networks (MCA-32) Assignment-1

**Assignment-1** Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks. Max. Marks: 15 Q1.a) What is computer network b) x.25 c) DQDB Unit -1 Q2.; OSI model and functions of its layers. Or Explain TCP/IP: Elements of Transport Protocols Unit -2 Q3. Explain Transmission media – guided and wireless media Or Introduction to switching (circuit, message and packet) Unit-3 Q4. Error control-error detection & correction Or What is Multiple Access Control Explain? Unit-4

Q5. Principles of congestion control

Or

Discuss Centralized and distributed routing

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### **SUBJECT:** Computer Networks

	(MCA-32) Assignment-II
Note: Attempt any five questions in equal marks.	all. First question is compulsory. All questions carry Max. Marks: 15
Q1. a) UDP b) IP c) ISDN	
1	Unit-1
Q2.Discuss Various Categories of Net	tworks - LAN, MAN, WAN
•	Or
Networks architecture: Concepts of	of protocols & services
1	Unit-2
Q3. Components of a data communic	ation system.
	Or
Discuss Multiplexing (frequency of	division and time division).
1	Unit-3
Q4. Framing and Error control: Frami	ng techniques
	Or
Explain Sliding Window protocols	S
1	Unit-4
Q5. Discuss Broadcast and multicast r	routing.
	Or

Define Choke packets, load shading

(From the academic session 2020-21)

MCA SEMESTER-III

#### **SUBJECT: Elective-I (Core Java)**

(MCA-33) Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks.

Max. Marks: 15

Q1.a) JVM

- b) Define JDK
- c) Define HTML Tags

Unit-1

Q 2. What is operator and types of operators in java.

or

Data types & types of Data types in java.

Unit-2

Q 3. What is constrictor & types of constructor in java

or

Define string & vectors with example

Unit-3

Q 4. What is Exception handling

or

Write a note on stringBuilder in java.

Unit-4

Q5. Define applet lifecycle

or

Write a note on AWT classes

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MCA SEMESTER-III

#### **SUBJECT: Elective-I (CORE JAVA)**

(MCA-33) Assignment-II

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks.

Max. Marks: 15

- Q1.a) Scalar data types
  - **b**) finalizer
  - c) StringBuffer class

Unit-1

Q2.Define control structures in java

Or

Define running Java applications

Unit-2

Q3.Explain polymorphism with example

Or

Define visibility controls with example

Unit-3

Q4. Explain Immutable class

or

Creating your own exceptions.

Unit-4

Q5. What is AWT controls Layout Managers explain with example

or

Explain Tokenizes class

(From the academic session 2020-21)

MCA SEMESTER-III

# SUBJECT: Elective-II(Computer Architecture and Parallel Processing) (MCA-34) Assignment-1

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks.

Max. Marks: 15

- Q1.a) Define Thread
  - b) VLIW
  - c) MIMD

Unit-1

2. Explain evolution of computer architecture

Or

Define types and levels of parallelism.

Unit-2

3. Define principles of pipelined instruction processing

Or

Note on collision free scheduling

Unit-3

- 4. Discuss in detail:
  - a. Superscalar pipeline design
  - b. TLB

Or

Explain interleaved memory organization

Unit-4

5. Note on switching networks-crossbar & multistage network

or

Define cache coherence protocol

(From the academic session 2020-21)

MCA SEMESTER-III

# SUBJECT: Elective-II(Computer Architecture and Parallel Processing) (MCA-34) Assignment-II

Note: Attempt any five questions in all. First question is compulsory. All questions carry equal marks.

Max. Marks: 15

- Q1.a) COMA
  - b) Loop scheduling
  - c) NUMA

Unit-1

Q2.Explain classifications of parallel architectures,

Or

Define relationship between languages and parallel architectures.

Unit-2

Q3. Explain linear pipeline clocking and timing control.

or

Define synchronous & asynchronous pipelining

Unit-3

Q4. Memory Hierarchy Technology: Inclusion, coherence and locality

Or

Define cache addressing models

Unit-4

Q5. Note hierarchical cache coherence protocol

Or

Define Cache coherence problem

(From the academic session 2020-21)

MCA SEMESTER-III

### **SUBJECT:** Elective-III(Data Mining and Warehousing)

(MCA-35) **Assignment-1** 

Note:	Attempt any five questions in all. First question is compulsory. A	All questions carry
	equal marks.	
		Max. Marks: 15
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Note: Attempt any five questions in all. First question is compulsory. equal marks.	All questions c
equai marks.	Max. Marks:
Q1.a) OLAP	
b) Data Mining	
c) Cluster analysis	
Unit-1	
<ol> <li>Define Classification of data mining Or</li> </ol>	
Explain Data mining primitives	
Unit-2	
3. Difference between operational data base systems and data warehous	e
Or	
Discuss a Multidimensional Data Model	
Unit-3	
4. Define constraint-based association Mining	
$\operatorname{Or}$ Discuss Data mining multilevel association rules from transaction datab	oases

Unit-4

5 Discuss Bayesian classification

Or

What is Cluster Analysis, Types of Data in Cluster Analysis

(From the academic session 2020-21)

MCA SEMESTER-III

### **SUBJECT: Elective-III (Data Mining and Warehousing)**

(MCA-35) Assignment\_II

Assignment-11
Note: Attempt any five questions in all. First question is compulsory. All questions carequal marks.  Max. Marks: 1
<ul><li>Q1.a) Data Cleaning</li><li>b) Data Warehouse uses</li><li>c) Data reduction</li></ul>
Unit-1
2. Discuss importance of datamining
Or
Explain Data Integration and transformation
Unit-2 3. Discuss Data warehouse and OLAP Technology for data mining Or Architecture & Implementation of data mining
Unit-3
4. Discuss Association Rule Mining
Or
Explain multidimensional association rules from relational databases and data warehouse
Unit-4 5. Applications and Trends in Data Mining
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What is Cluster Analysis, Types of Data in Cluster Analysis,