(3 Hours) [Total Marks: 100]

- **Q1. Is Compulsory.**
- **Solve any 4 questions from Q2. To Q7.**

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Q.1	A)	What is State Transition Testing Technique? Draw the transition tree for a Stack.	10
	B)	Explain General principles of testing? What must be the psychology of testing?	10
Q.2	A)	Explain the difference between verification and validation? Explain how these activities play role in V- model?	10
	B)	Why test cases are prioritized? Mention the criteria for prioritizing the test cases.	10
Q.3	A)	What are Generic types of Testing? Explain Functional v/s non-functional testing?	10
	B)	What is mean by review? Explain different Steps in review process?	10
Q.4	A)	What is Incident Management? Explain Incident reporting and Incident Status Model in detail	10
	B)	Explain Equivalence class partitioning and boundary value analysis with an example?	10
Q.5	A)	Explain the criteria for selecting the test tools?	10
	B)	Explain the Integration testing in terms of Test object and Test Strategies	10
Q.6	A)	Explain cost and Economy aspects of testing.	10
	B)	Draw CFG and calculate statement coverage, branch coverage for the given code	10

```
main()
{
IF A = 10 THEN
        IF B > C THEN
              A = B
        ELSE
              A = C
        ENDIF
 ENDIF
Print A
 Print B
Print C
}
```

Q.7   Write Short notes on:
1. Test Exit Criteria
2. Intuitive and Experience Based Testing
3. Load, stress testing.
4. OO Testing

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M.C.A. (SEM-V)
WIRELESS TECHNOLOGY
(MAY-2019)

Total Marks: 100

(3 Hours)

N.B. :   1) Question No.1 is **compulsory.**
              2) Attempt any **four** from the remaining **six** questions.
              3) Figures to the right indicate full marks

1. (a) What are the advantages of spreading the spectrum? Discuss how it is   (10)
         done using frequency hopping method.
    (b) Explain the different components of GSM architecture and discuss the   (10)
         functions of each component.

2. (a) Discuss the various impairments which will affect the wireless   (10)
         environment.
    (b) What is CDMA? Compare CDMA with TDMA and FDMA   (10)
         techniques.

3. (a) What does (n,k,K) mean in convolution code? Explain (2,1,3) with the   (10)
         help of shift register and state diagram.
    (b) Describe J2ME architecture with respect to various configurations and   (10)
         profiles. List various states of midlet life cycle.

4. (a) What is piconet and scatternet? Explain in brief Bluetooth protocol   (10)
         stack.
    (b) Discuss the IEEE 802.11 system architecture with its services.   (10)

5. (a) Discuss the different types of antennas used in wireless   (10)
         communication.
    (b) Why WEP is a weak algorithm? Explain the use of WPA and WPA2   (10)
         in implementing WiFi security.

6. (a) What is WiMax? Explain the basic component and setup of WiMax   (10)
         networks.
    (b) What are the functions supported by WML? In brief, describe WTLS   (10)
         security services

7. Write Short Notes on any **four** of the following :-   (20)
        a) Digital modulation techniques (ASK, FSK, PSK)
        b) Fresnel Zone
        c) Symbian OS
        d) History of wireless communication
        e) WAE

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M.C.A. (SEM-V)
DISTRIBUTED COMPUTING
(MAY-2019)

Time: 3 Hours [100 Marks]

Note

- Question **1** is **compulsory**
- Answer any **four** of the remaining **six** questions
- **All** questions carry **equal** marks

Q1

(A) Explain different distributed computing model with detail [10]

(B) What is a Service Oriented Architecture (SOA)? Explain in detail [10]

Q2

(A) What is Stub explain the implementation of stub in RPC Mechanism [10]

(B) Describe the logical clock and explain the issue in detail [10]

Q3

(A) What is Cloud computing? Explain the principle of cloud computing. [10]

(B) Explain the Load balancing model with detail [10]

Q4

(A) What is clock synchronization? Explain the algorithms used in a distributed computing [10]

(B) When the critical Section implementation? How to implement Mutual Exclusion algorithm? [10]

Q5

(A) What is Consistency Model? Explain in detail. [10]

(B) Describe the Resource Management and Process management in distributed system. [10]

Q6 **Write a Short Note (Any four)** [20]

a) Grid computing   b) Data Security in Cloud

c) Distributed Share Memory   d) IPC in MACH

e) Local procedure call & Remote procedure call

Q7

(A) Explain the Message Passing Mechanism in the IPC [10]

(B) Explain the Difference techniques in distributed file system [10]

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(3 Hours) **Total Marks:100**

N.B. : 1) Question No.1 is **compulsory.**
2) Attempt any **four** from the remaining **six** questions.
3) All questions carry equal marks.

1 (a) Explain Page events and Page Life Cycle of ASP.NET. 10

(b) Explain database connectivity step to connect database with the
example. 10

2 (a) Explain Validation control of ASP.Net in detail . 10

(b) Explain Generics with the example. 10

3 (a) Explain Servlet Life Cycle in detail. 10

(b)Explain Session and Threat Management in detail. 10

4 (a) Explain Sax and DOM of XML in detail. 10

(b) Explain HTML controls of ASP.NET in detail. 10

5 (a) Explain Threading Model in detail. 10

(b) Explain Inheritance and Polymorphism with the help of example. 10

6 (a) What is World Wide Web? Explain Web Search Engines in detail. 10

(b) Explain Architecture of .NET framework. 10

7 Short Notes. (Any four) 20

a) Arrays

b) SOA

c) CLR

d) PostBack and CrossPage Posting

e) Response Dispatching

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M.C.A. (SEM-V)
LOGISTICS AND SUPPLY CHAIN MANAGEMENT
(MAY-2019)

Time: 3 Hrs   Total. Marks: 100

NOTE:
I.   Question No. 1 is **Compulsory**.
II.   Attempt any four out of remaining six
III.   Elaborate each answer with the help of an **example**

1.	(A)	Explain the role of distribution network in supply chain management.	10
	(B)	Differentiate between VMI and JIT.	10
2.	(A)	Explain traditional and modern approaches to supply chain management.	10
	(B)	Explain role of IT in business. What are various IT tools used now days.	10
3.	(A)	Explain demand and forecasting. What are the types of demand and Characteristics of forecast?	10
	(B)	Explain fleet management in detail.	10
4.	(A)	Explain vendor management inventory in detail with its diagrammatic model.	10
	(B)	Explain the concept of just in time manufacturing with suitable example.	10
5.	(A)	What are different transport formats and different modes of transportation.	10
	(B)	What are the different forms and benefits of benchmarking?	10
6.	(A)	Explain push pull model in detail with suitable example.	10
	(B)	What types of risk associate with the use of IT in supply chain management.	10
7.		Attempt any four	20
	(A)	Trends in Packaging	
	(B)	Data Warehousing in SCM	
	(C)	Stages of supply chain	
	(D)	Benchmarking	
	(E)	Economic order quantity (E.O.Q)	

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