MCA (SEM- V)

Software Testing

(OCT-16)

Q.P. Code : 512801

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

N.B. : (1) Question **No.1** is **compulsory.**
(2) Answer **any 4** of the remaining questions
(3) **Figures** to the **right** indicate full **marks.**

1. (a) Explain General principles of testing? What must be the psychology of testing? **10**
   (b) Explain cost and Economy aspects of testing. **10**

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 ior prioritizing the test cases. **10**

3. (a) Explain cause effect graphing and decision table technique with suitable example? **10**
   (b) What is mean by review? What are the positive effects of review? Explain Work steps involved in review process? **10**

4. (a) Explain the Condition determination testing. Compare with branch condition combination testing and branch condition testing. Give example. **10**
   (b) Explain the Integration testing in terms of Test object and Test Strategies. **10**

5. (a) Explain test tools in detail for dynamic testing? **10**
   (b) Explain State transition testing with example? **10**

6. (a) what is Incident Management? Explain Incident reporting and Incident Status Model in detail **10**
   (b) What are Generic types of Testing? Explain Functional testing v/s non-functional **10**

7. Write short notes (**Any Four**) :-- **20**
   (a) Software Quality.
   (b) Data Flow anomaly.
   (c) Smoke testing and Syntax Testing.
   (d) Preventive V /s Reactive approach.
   (e) OO testing.

MCA (SEM- V)
Wireless Technology
(OCT-16)

QP CODE : 512902

[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 indicates full marks

1. (a) Describe the WAE architecture and WAP protocol stack in brief. (10)
   (b) Describe GSM architecture and its concept of physical channel (10)

2. (a) List the benefits of spread spectrum. Describe Direct Sequence Spread Spectrum (10)
   (b) Explain the terms fading in mobile environment.What are the different forms of fading? (10)

3. (a) What are block codes and convolution codes? Explain the (n,k,K) convolution code. Draw an encoder with values (2,1,3). (10)
   (b) What are the advantages and disadvantages of wireless LAN over wired LAN? Explain why CSMA/CD cannot be implemented in wireless LAN (10)

4. (a) What are configuration and profiles under J2ME? What are the challenges while programming for mobile platform? (10)
   (b) Describe symbian OS features (10)

5. (a) What are the functions supported by WML? In brief, describe WTLS security services (10)
   (b) Discuss the services provided by IEEE 802.11 with its system architecture. (10)

6. (a) Discuss the application areas that are supported by Bluetooth. How the security is achieved in Bluetooth (10)
   (b) In Bluetooth technology what is a Piconet and Scatternet? Discuss the inquiry and paging procedure of Bluetooth. (10)

7. Write Short Notes on the following :- (20)
   a) Digital modulation techniques (ASK, FSK, PSK)
   b) CDMA
   c) Impairments in wireless transmission
   d) WPA

MCA (SEM- V)
Distributed Computing
(OCT-16)

Q.P. Code : 513001

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

Note :(1) Q1 is compulsory
(2) Attempt any four from Q 2 to Q 7

1. a) Explain distributed computing system and state the vanous architecture of distributed computing system. Also compare and contrast between Network Operating System and the Distributed Operating System with a suitable example. **10**
   b. Explain Election algorithm. State and explain why Ring algorithm is better than the Bully algorithm. **10**

2. a. Explain the various design issues in Distributed Operating System. What is DCE and explain DCE components and DCE cells in brief. **10**
   b. Explain process addressing and the methods of process addressing in brief. Describe many to many Group communication in detail. **10**

3. a. State with the help of a suitable diagram the working mechanism of RPC. How remote procedure may be executed in case of failure using tall semantics of an RPC system. **10**
   b. Explain the different ways to implement Sequential Consistency model with suitable diagrams. **10**

4. a. "External synchronization ensures internal synchronization. But the vice versa does not stand true."Justify. Explain Lamport's algorithm in brief. **10**
   b. State the various desirable features of resource management. Explain dynamic load balancing algorithm in detail. **10**

5. a. Explain the process migration mechanism m brief. State the address space transfer mechanism in detail. . **10**
   b. Explain file accessing methods and file sharing semantics in brief. Compare and contrast between file caching and file replication. **10**

6. a. What is system oriented names and how the system oriented names are generated.Explain the various object locating mechanisms in brief. **10**
   b. "Threads are called Lightweight and Processes are called as Heavy weight." Justify with suitable examples and appropriate diagrams. Explain in brief LRPC. **10**

7. Write a short note on any Four of the following:- **20**
   i) Distributed Computing System Model
   ii) Buffering
   iii) Binding agent
   iv) Munin
   v) Name Cache

MCA (SEM- V)
Advanced Web Technologies
(OCT-16)

QP CODE : 513102

[Max Marks: 100] **[Duration: 3 hrs]**

N.B.: (1) Question No 1 is compulsory
(2) Answer any four questions from Q.2 to 7
(3) All questions carry equal marks

Q 1	a)	Explain .Net Framework & its component with suitable diagram.	10
	b)	What is ADO.Net? Explain steps to connect a database using C# With example.	10
Q 2	a)	What is Generics in C#? What are the advantages of using Generics? Explain any two Generic classes.	10
	b)	Explain ASP.Net validation controls with suitable example.	10
Q 3	a)	Explain the XML parser. Explain DTD and Schema with an example.	10
	b)	List the different classes which are used in C# for file handling? Explain any two classes with the help of example.	10
Q 4		Write Notes on (Any Four)	20
		(a) Search Engine Optimization	
		(b) Servlet Threading Model	
		(c) Exception Handling	
		(d) Post back and Cross page Posting	
		(e) XSLT	
Q 5	a)	What is servlet? What are the advantages of servlet? Explain the life cycle of servlets.	10
	b)	Design a customer Registration form for online shopping and save details in customer details in customer table using ASP.NET	10
Q 6	a)	Explain all the JSP directives with example	10
	b)	What is coding model in ASP.Net? Explain various ASP.Net web page Code models in details.	10
Q 7	a)	What is Request dispatching in JSP explain with example	10
	b)	Explain any two servlet classes with example.	10

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MCA (SEM- V)

Elective - I

Elective – 2 Logistics & Supply Chain

(OCT-16)

Q. P. Code : 513202

Total. Marks: 100 **Time: 3 Hrs**

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 in detail SCM in current scenario	**10**
	(B)	What is demand forecasting? what are types of demand forecasting?	**10**
2.	**(A)**	Differentiate between traditional and modern approaches to SCM.	**10**
	(B)	Differentiate between JIT & VMI	**10**
3.	**(A)**	Explain E.O.Q model in detail.	**10**
	(B)	Explain private fleet management. Explain with suitable example.	**10**
4.	**(A)**	What is milk-run supply chain. Elaborate its pros and cons.	**10**
	(B)	Explain warehouse management in details & list different types of warehouses in SCM.	**10**
5.	**(A)**	Explain data mining tools with their advantages and disadvantages.	**10**
	(B)	What are different modes of transportation? Explain in detail.	**10**
6.	**(A)**	What is benchmarking? Explain with example.	**10**
	(B)	Explain distribution networks and types in detail.	**10**
7.		Explain any four of the following terms :	**20**

(A) Packaging trends
(B) Role of internet in SCM
(C) JIT-II
(D) VMI
(E) Benchmarking in distribution

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