

M.C.A [SEM – V]
Software Testing
(DEC- 2017)

Q.P. Code: 22699

Duration: 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

- Q.1** **A)** What is cause effect graphing decision table technique? Explain with an example. **10**
- B)** Which are fundamental tests processes? Explain. **10**
- Q.2** **A)** Explain the role of testing in SDLC. Explain System testing and its importance. **10**
- B)** Write the different steps involved in the review process. **10**
- Q.3** **A)** Explain the difference between functional and non-functional testing. Explain load testing, performance testing and stress testing. **10**
- B)** Explain the test objectives, test environment and test strategies for unit testing. **10**
- Q.4** **A)** Compare black box testing and white box testing. Explain with the help of an example. **10**
- B)** What is State Transition Testing Technique? Draw the transition tree for a Stack. **10**
- Q.5** **A)** Explain different types of test strategies. Explain Analytical versus Heuristic Approach. **10**
- B)** Explain the cost and economy aspects of testing. **10**
- Q.6** **A)** What are the test tools for dynamic and static testing? **10**
- B)** Describe criteria for selection and introduction of test tools. **10**
- Q.7** Write short notes on any four: **20**
- (a) Integration Testing
- (b) Intuitive and Experience Based Testing
- (c) Incident Reporting
- (d) Software Quality
- (e) Static Testing

M.C.A [SEM – V]
Wireless Technology
(DEC- 2017)

Q.P. Code: 22601

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) Explain the IEEE 802.11 system architecture and its services. (10)
(b) Explain GSM system architecture in detail. (10)
2. (a) What are the advantages of spreading the spectrum? Discuss how it is done using frequency hopping method. (10)
(b) What is handover? Discuss the different types of handover and what in what situation the handover takes place. (10)
3. (a) What is WiMax? Explain the basic component and setup of WiMax networks. (10)
(b) Describe J2ME architecture with respect to various configurations and profiles. List various states of midlet life cycle. (10)
4. (a) What is piconet and scatternet? Explain in brief Bluetooth protocol stack. (10)
(b) Why WEP is a weak algorithm? Explain the use of WPA and WPA2 in implementing WiFi security. (10)
5. (a) Discuss the different types of antennas used in wireless communication. (10)
(b) What is CDMA? Compare CDMA with TDMA and FDMA techniques. (10)
6. (a) What does (n,k,K) mean in convolution code? Explain $(2,1,3)$ with the help of shift register and state diagram. (10)
(b) What are the functions supported by WML? In brief, describe WTLS security services (10)
7. Write Short Notes on any **four** of the following :- (20)
 - a) Digital modulation techniques (ASK, FSK, PSK)
 - b) Mobile IP
 - c) Symbian OS
 - d) Free Space Loss
 - e) Atmospheric Absorption

M.C.A [SEM – V]
Distributed Computing
(DEC- 2017)

Q.P. Code :04146

[Time: Three Hours]

[Marks:80]

Please check whether you have got the right question paper.

- N.B:
1. Question.No.1 is compulsory.
 2. Attempt any four from Q2 to Q7.
 3. Figures to the right indicate full marks.

1. a. Explain the issues in design of a Distributed OS? (10)
b. Write short notes on i) DCE ii) Buffering (10)
2. a. Describe the blocking and non-blocking types of IPC along with its pros and cons. Which is easier to implement and why? (10)
b. Explain the various consistency models of DSM in brief. (10)
3. a. Explain the synchronization algorithms in brief. (10)
b. Discuss the issues in designing Load-balancing algorithm. (10)
4. a. Give suitable examples for each of the following, a process using multiple threads:- (10)
I) In dispatcher worker model
II) In a pipelined process model
III) In a team model
b. Explain how RPC model works with suitable diagram. (10)
5. a. What is an idempotent operation? Which of the following operations are idempotent? (10)
Justify.
a. `Cin>>data;`
b. `ifstream infile("input text");infile.seek();`
c. `cout<< data;`
d. `int a=1,b=2,c; c= a + b;`
b. What are the different address space transfer mechanisms used in process transfer? (10)
6. a. Explain the various file accessing models and the file sharing semantics in brief. (10)
b. Write a short note on i) Thrashing ii) Human oriented names (10)
7. Write short notes on **any four** from the following: (20)
a. Process addressing
b. Client-Server binding
c. Election algorithm
d. NFS vs. AFS
e. Munin

----- xxx All the Best xxx -----

M.C.A [SEM – V]
Advanced Web Technologies
(DEC- 2017)

QP Code : 25679

Total Marks: 100

(3 Hours)

- N.B.: (1) Question No. 1 is compulsory
(2) Solve any four questions from Question Nos. 2 to 7
(3) All question carries equal 20 marks.

- Q1. Write short notes on (any four):- (20)
- a) Reference Data Types in C#
 - b) DataBound Controls in ASP.NET
 - c) Semantic Web
 - d) XML Schema
 - e) SaaS
- Q2. a) Explain .NET Framework in detail. (10)
b) Explain Search engines optimization and its limitations. (10)
- Q3. a) Explain Generics in C# with example. (10)
b) What is Cookie? Design a JSP page to demonstrate the use of Cookies. (10)
- Q4. a) What is DTD? Why to use DTD? Explain internal DTD and external DTD with an example. (10)
b) Explain Servlets life cycle in detail. (10)
- Q5. a) How will you create custom validation control in ASP.NET? Explain with suitable example. (10)
b) Design a Registration form for online shopping site using ASP.NET with add, update, delete operations. (10)
- Q6 a) Illustrate RequestDispatcher in Servlet (10)
b) Explain <JSP:include> and <JSP:forward> action tag with suitable example. (10)
- Q7. a) Differentiate between (any two) (10)
 - i. Managed code and Unmanaged code in .NET
 - ii. HttpServlet and GenericServlet
 - iii. J2EE and .NET
b) Explain Web Service architecture. (10)
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M.C.A [SEM – V]
Elective – 2 Logistics & Supply Chain
Management

(DEC- 2017)

Q. P. Code : 27604

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 supply chain performance drivers. **10**
(B) Explain JIT and VMI **10**
2. (A) Explain the role of Distribution Networks in supply chain management. **10**
(B) Explain traditional and modern approaches to SCM. **10**
3. (A) Explain how Information Technology and Internet plays important role in SCM, explain with example. **10**
(B) Explain risk management forecasting in detail. **10**
4. (A) Explain warehousing in detail and its types used significantly in SCM industries. **10**
(B) State different parties involved in the supply chain and by giving appropriate examples explain the role of each party involved. **10**
5. (A) Explain Customer Life cycle in detail. **10**
(B) Explain in detail cycle view of supply chain? Give one real time example of any current business model. **10**
6. (A) Explain push-pull model in detail with one real time market example. **10**
(B) What are different transport formats and different modes of transportation? **10**
7. Explain any four of the following terms : **20**
(A) Network Optimization Model
(B) Benchmarking
(C) Data mining tools
(D) Trends in IT relevant to SCM
(E) JIT-II
