

**M.C.A. (Sem - IV)**  
**Software Testing**  
**(May-2017)**

**Q.P. Code :06118**

**[Time: 3 Hours]**

**[ Marks:100]**

**N.B:**

- Please check whether you have got the right question paper.
1. Q.1 is Compulsory.
  2. Solve any 4 questions from Q2. To Q7.

- Q.1 A Explain the phases of the fundamental test process. 10  
B Explain the equivalence class partition technique with examples? 10
- Q.2 A What is static analysis? Explain the techniques to do Static analysis? 10  
B What are the anomalies that can be found during Data flow Analysis? For the given code, tell the anomalies that it has. 10
- ```
Void exchange (int&Min, int&Max) {  
    Int Help;  
    If (Min>Max){  
        Max = Help;  
        Max = Min;  
        Help = Min;  
    }  
}
```
- Q.3 A What is the difference between equivalence class partitioning and boundary value technique? 10  
B Christmas Bonus of the employee depending on affiliation to the company. Employee receive a equal to 10  
50%  
of their monthly income if they have been working for the company for more than 3 years, employee who  
have been employed for more than 5 years receive a 75% bonus and those with more than 8 years of  
employment are awarded 100% bonus. Design test cases by using Equivalence class and Boundary value  
analysis.
- Q.4 A Explain Cause Effect Graph and decision table technique with suitable example. 10  
B Explain statement coverage, branch coverage and path coverage with suitable examples. 10
- Q.5 A Discuss four typical approaches to determine a test strategy. 10  
B What data should be contained in an incident report? How incidents are classified? What is the purpose 10  
of an incident status model?
- Q.6 A Describe the principle of data driven testing and what steps should be taken when selecting a test tool? 10  
B How the OO-testing is different from conventional testing and explain with suitable examples? 10
- Q.7 Write short notes on any four: 20  
A. Agile Methodology  
B. W-Model  
C. Psychology of Testing  
D. V-Model  
E. Testing Vs Debugging

**M.C.A. (Sem - V)**  
**Wireless Technology**  
**(May-2017)**

**Q.P. Code :06233**

**[Time: 3 Hours]**

**[Marks:100]**

Please check whether you have got the right question paper.

- 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.

- Q.1** a. What are the advantages of spread spectrum? Explain Direct Sequence Spread Spectrum. **10**  
b. Explain the various generations of cellular communication. **10**
- Q.2** a. What does  $(n, k, K)$  mean in convolution code? Explain  $(2, 1, 3)$  convolution code with example. **10**  
b. What is free space loss? Determine the free space loss at 6 GHz for the shortest path to a synchronous satellite from earth (35,863km). **10**
- Q.3** a. Explain the various impairments that can affect wireless communication. **10**  
b. Explain IEEE 802.11 architecture and the services provided by the system. **10**
- Q.4** a. Discuss the GSM system architecture in detail. **10**  
b. Describe J2ME architecture with respect to various configurations and profiles. List various states of midlet life cycle. **10**
- Q.5** a. Explain how the different types of fading affect the mobile environment. **10**  
b. What is handoff? What are the strategies used for handoff? **10**
- Q.6** a. Explain the various states that a Bluetooth enabled device can enter into. **10**  
b. Analyze the architecture of IEEE 802.16. **10**
- Q.7** Write short notes on the following **20**
- a. WML
  - b. CDMA
  - c. Antenna
  - d. GPRS
-

**M.C.A. (Sem - V)**  
**Distributed Computing**  
**(May-2017)**

**Q.P. Code :04147**

**[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 in detail the different Distributed Computing Models? Also elaborate on the desirable features of a good distributed file system. (10)  
b) Write short notes on i)Thrashing ii) Granularity (10)
  2. a) Explain how logical clocks are implemented with counters and physical clocks? (10)  
b) Give the importance of Message Ordering and its types? Explain with the help of diagram. (10)
  3. a) Explain the concept of total freezing in address space transfer mechanism for a process migration facility with proper diagram. Is it better than pretransferring or transfer on reference? (10)  
b) Give a detailed description of RMI Implementation? (10)
  4. a) Compare and Contrast LPC and RPC. (10)  
b) Discuss the various algorithms to carry out clock synchronization? (10)
  5. a) What is a deadlock in a distributed system? (10)  
b) Explain the major difference between Sequential and Casual Consistency Models? (10)
  6. a) Give a short note on Amoeba Distributed System? (10)  
b) List all the features of a Good Naming System. (10)
  7. Write short notes on **any four** of the following (20)
    - a) Marshalling
    - b) Multidatagram Messages
    - c) System Oriented Names
    - d) Threads
    - e) Happened Before Relation
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**M.C.A. (Sem - V)**  
**Advanced Web Technologies**  
**(May-2017)**

**Q.P. Code :08262**

**[Time: 3:00 Hours]**

**[ Marks:100]**

Please check whether you have got the right question paper.

- N.B:
1. Question No. 1 is Compulsory.
  2. Attempt any four from the remaining six questions.
  3. Illustrate answers with neat sketches and programming code whenever required.
  4. Answers to questions should be grouped and written together.

1. a)What is Class? How will you create a class in C#? Explain different components that can be added in a C# Class. 10  
b)What is Dot NET Framework? Explain architecture of Dot NET Framework in detail. 10
2. a)What are Directives in JSP? Explain Page and Include Directive in detail. 10  
b)What is SOAP? Explain the Role of SOAP in Web services architecture. 10
3. a)Explain the difference between  
i)Cross Page and postback posting 10  
ii)Inline Coding and Code Behind Coding.  
b)Write a JSP Program to check whether entered number is odd or even. 10
4. a)Explain use of Servlet Config and Servlet Context classes with a suitable program. 10  
b)Write a C# program to read and write the contents from/to a text file. 10
5. a)What are Different Threading models in Servlets? Explain how will you implement Single ThreadModel in Servlets with a suitable program. 10  
b)Explain Exception handling Mechanism of C#. 10
6. a)Explain the ADO.NET disconnected architecture to retrieve data from database. 10  
b)Design a simple JSP application to input username and password and authentication of the user. 10
7. Write Notes on (Any Four) 20  
a)Software as a Service  
b)XML  
c)HttpServlet and GenericServlet  
d)Validation Controls in ASP.NET  
e)Servlet Life Cycle

**MCA (SEM-V)**  
***Elective – 2 Logistics & Supply Chain***  
***Management***  
**(May-2017)**

**Q.P. Code : 01554**

**[Time : 3 Hours]**

**[ Marks : 100 ]**

Please check whether you have got the right question paper.

- N.B:**
1. Question **No. 1** is **compulsory**.
  2. Attempt **any four** out of remaining **six**.
  3. **Elaborate** each answer with the help of an **example**.

1. (a) What do you mean by Demand Forecasting? What are types of demand and the characteristics of a forecast? **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 Customer Life Cycle 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) What are different transport formats and different modes of transportation? **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) Explain Risk Management Forecasting in detail. **10**
7. Explain **any four** of the following terms : **20**
  - (a) Role of Packaging in SCM
  - (b) Classical inventory management
  - (c) Benchmarking
  - (d) Network Optimization Model
  - (e) Stages of Supply Chain