

M.C.A (Sem - V)
Software Testing
April - 2015

M.C.A. (Sem -V)

QP Code : 19455

April - 2015

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

1. (a) What is Quality? Explain Quality Assurance and Quality Control with detail. (10)
(b) Which are fundamental tests processes? (10)
2. (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)
3. (a) Difference between black box and white box testing techniques with suitable example. (10)
(b) What are the stress, load and Performance testing? Explain with suitable example. (10)
4. (a) What are the differences between functional testing and non-functional testing? Describe Different types of non-functional testing. (10)
(b) Describe different types of Integration testing. (10)
5. (a) What is Agile Methodology? Explain in detail. (10)
(b) Why Gray box testing can be called neither a Black box nor a White box testing technique? Compare and contrast between Black box and White box testing technique. (10)
6. (a) What are the criteria for prioritization of test cases? What are the cost of defects and the cost of testing? How would you optimize between the two? (10)
(b) Explain the Automation tool specification, classification and Identification used in testing. (10)
7. Write short notes on any four: (20)
 - (a) Exploratory Testing.
 - (b) W model
 - (c) Incident Reporting
 - (d) Difference between procedural testing and OO testing.
 - (e) Static Testing

ZB-Con. : 8543-15.

(3 Hours)

[Total Marks : 100

N.B. : (1) Question No.1 is **compulsory**.

(2) Attempt any **four** the remaining questions..

(3) Figures on the right indicate **full** marks.

1. (a) Briefly outline the architecture of 802.11 protocol for wireless communication. **10**
(b) Why do you require to spread the spectrum? Explain the different methods of spreading the data and spectrum in a wireless environment. **10**
2. (a) Describe the different type of noise that will affect the wireless signal & Explain why WLL system serves cells of a smaller radius. **10**
(b) How is Localization, location update, roaming one in GSM and reflected in the database? **10**
3. (a) What is WiMax? Explain the basic component and setup of WiMax networks. **10**
(b) What is Handoff? Explain different types & strategies of Handoff in cellular Networks? **10**
4. (a) What is CDMA? Compare CDMA with TDMA and FDMA Techniques. **10**
(b) What are the challenges of the modern wireless communication system? Explain any two in detail. **10**
5. (a) What is the difference between GSM and GPRS? Explain the architecture of GPRS. **10**
(b) Describe in the brief the use of cordless system for telecommunication. **10**
6. (a) Explain with suitable illustration the WAE components. **10**
(b) Why WEP is a weak algorithm? Discuss WPA and WPA2. **10**
7. Write short notes on any FOUR (5 Mark Each) **20**
 - (a) XHTML & CHTML
 - (b) Fading
 - (c) Bluetooth
 - (d) J2ME architecture
 - (e) Mobile Operating System

M.C.A (Sem - V)
Distributed Computing
April - 2015

M.C.A. (Sem -V).

QP Code : 19460 April - 2015

(3 Hours)

Total Marks: 100

N.B.: (1) **Question No. 1 is compulsory.**
(2) **Attempt any four out of remaining six questions.**

- 1) Explain the following terms briefly: (20)
 - i) DCE
 - ii) Real Time System
 - iii) Workstation Server Model
 - iv) Namespace
- 2) a) What different transparencies a distributed system has to employ to achieve a single processor image. (10)
- b) What are election algorithms? Explain bully algorithm in detail with diagram. Is it more efficient than ring algorithm? (10)
- 3) a) What is thrashing and why is it caused? Can it be completely eliminated? (10)
- b) What is Happened Before Relation? How does it help in event ordering? Explain with help of an example. (10)
- 4) a) What do you mean by flexible reliability in multicast communication? Explain. (10)
- b) What is Binding Agent? What is its role in client server communication? (10)
- 5) a) Differentiate between stateful and stateless servers. Which one is more efficient for fault recovery? (10)
- b) What is stub? How are stubs generated? Explain how they make RPC transparent. (10)
- 6) a) What are the different address transfer mechanisms used in process transfer? (10)
- b) What is sequential consistency? How is data locating mechanism handled in replicated Migrating Blocks and Non Replicated Migrating Blocks? (10)
- 7) What are the differences between the following: (20)
 - i. Replication / Caching
 - ii. Idempotent/ Non idempotent operations
 - iii. Mutable/ Immutable file model
 - iv. Human Oriented/ System Oriented Names

(3 Hours)

[Total Marks : 100

- N.B. :** (1) Question No.1 is **compulsory**.
(2) **Answer any four questions Q2. To Q7.**
(3) **All Questions carry equal 20 marks**

1. (a) What is .NET Framework? What is CLR? Explain the working of CLR. Add a note on features of CLR. **10**
(b) What is session Management? Explain different types of Session Handling in Servlet. **10**
2. (a) Explain the difference between **10**
(i) Servlet and CGI
(ii) SendRedirect and RequestDispatcher
(b) Write a program on Login page using JSP with Oracle as backend database. Design a JSP application to Display the Marksheet of a student. **10**
Consider the following points:-
(a) Accept the roll number on index page.
(b) On click of submit button the result of the student should be displayed
(c) Results database- Roll no; name, sub 1, sub2, total
3. (a) Explain the ASP .NET controls with suitable example. 10 marks **10**
(b) List the different classes which are used in C-Sharp for file handling? Explain any two classes with the help of example.
4. (a) Design a user Registration form for a Recruitment site using ASP.NET and validate it. **10**
(b) Enlist all 9 implicit objects in JSP and gives details description for them. **10**
5. (a) WAP Counter program in JSP using Session Handling. **10**
(b) What is Request Dispatcher in Servlet and Explain with example. **10**
6. (a) Write a C#.NET code which will interact with database and display mark sheet of the MCA Sem V students along with each subjects details scored marks and total and average. **10**
(b) What are different standard action in JSP. Explain with suitable code. Write program on JSP Bean to get and set value on bean variable. **10**

[TURN OVER

QP Code : 19464

2

- 7** Write short note on following (anyfour) **20**
- (a)PostBack and CrossPage Posting
 - (b) DataSet and DataReader object
 - (c) Web Service and SOA.
 - (d) Reference datatypes in C#
 - (e) Difference between and include directive and include standard action.

M.C.A (Sem - V)
Elective – 2: Logistics & Supply Chain Management
April - 2015

QP Code : 19467

M.C.A. (Sem -V)

Time: 3 hrs
April - 2015

N.B.:

1. Question 1 is **compulsory**.
2. Answer **any four** out of remaining **six** Questions.
3. Answers to questions should be **grouped** and written **together**.

- Q1 (a): Explain role of IT in Business. What are the various IT tools that are used now days? (10)
- Q1 (b): What are different types of distribution networks. What types of networks are best suited to highly differentiated products? (10)
- Q2 (a): What are the major drivers of Supply Chain performance? How could an auto manufacturer use transportation to increase the efficiency of its Supply Chain? (10)
- Q2 (b): What do you mean by Demand and Forecasting? What are the types of demand and the characteristics of a forecast? (10)
- Q3 (a): How many cycles are involved in cycle view of Supply Chain? Consider the Supply Chain involved when a customer purchases a book at a book store. Identify the cycles in this supply Chain and location of Pull/Push boundary. (10)
- Q3 (b): What do you mean by procurement Management? What are the different kinds of Inventory in traditional Inventory Management? (10)
- Q4 (a): What are the differences between JIT and JIT-II? Explain JIT in detail. (10)
- Q4 (b): What are the different modes of the transportation? On what basis one should decide the best mode of transportation? (10)
- Q 5(a): Compare conventional business model and VMI model in detail. (10)
- Q5 (b): Discuss cross-docking method with examples. (10)
- Q6 (a) : Why is warehousing becoming an essential service for industries? Comment on this. (10)
- Q6 (b): What are different forms and benefits of benchmarking. (10)
- Q7: Write short notes on any four---- (20)
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| (a) Modern SCM Approach | (b) E.O.Q. |
| (c) Trends in Packaging | (d) Reverse Logistics |
| (e) Milk run and direct shipping methods | |