Name : ....

Roll No. : ....

Invigilator's Signature : ....

CS/M.Tech(CSE)/SEM-1/MCS-104(A)/2012-13

2012

WEB TECHNOLOGY & E-COMMERCE

Time Allotted : 3 Hours   *Full Marks* : 70
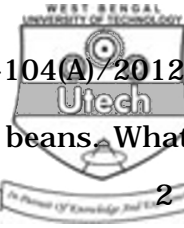
The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Answer any *five* questions.   5 × 14 = 70

1. a) What are the differences among web browser, web server and web portal ? Give examples. What is image map in a web browser ? How is it created in a web page using HTML ?   2 + 1 + 2 + 4

   b) Write some typical features of a markup language. What is the relation of HTML and XML to SGML ? Write the syntax of TABLE tag and its implementation in a web page.   2 + 1 + 2

2. a) What are the varieties of subgroup selectors in CSS1 ? Give exmaples.   6

   b) Write HTML/JavaScript code for taking user's login id and password from a web page. Also incorporate JavaScript code for verifying whether the password is more than eight character length or not and provide message accordingly.   5

   c) What is DOM ? Give the object hierarchy in DOM.   3

3. a) Give the block diagram for explaining the generic framework of e-commerce. 5

   b) What is software agent ? Write the different properties of *e*-cash. 2 + 4

   c) Differentiate between symmetric and asymmetric key crypto system. 3

4. a) What are the different internet access methods ? What are the important advantages and disadvantages of *e*-commerce ? 2 + 5

   b) What are the main functions of an e-market ? Give the typical steps of B2C transactions. 2 + 5

5. a) What is the use of server side includes ? What are the drawbacks of Client-Server architecture ? 2 + 2

   b) Draw the block diagram of J2EE architecture and explain breifly. Give a brief comparison among JSP and ASP. 3 + 2

   c) What do you understand by JDBC-ODBC bridging ? Write a program using VB scripts which will insert the student information (StdRegNo, StdName, Yr.of.join, Address, Contact No) in Student_Master table & front end validation will done by JavaScript. 2 + 3

6. a) Compare between EJB and simple Java beans. What is the usage of stateless session bean ? 2 + 2

   b) What are the services provided by the EJB container ? Explain XML DTD and schemas. 3 + 3

   c) Write a simple servlet program which will update the values to the student table in oracle database. 4

7. a) What is cookie ? Describe briefly the various ways of handling session of Servlet. 2 + 3

   b) What is the difference between HTML and XML ? What are the basic objects used in VB scripts ? 2 + 3

   c) Whether main method is used in Servlet program and why ? What are the differences of using prepared statement and callable statement ? 2 + 2

8. a) Describe the various types of Directives used in JPS with a suitable example. Describe the lifecycle of applet. 3 + 2

   b) Write a simple Java Bean which will store Employee data & write a JSP program by which it can access the properties of the Java bean. 4

   c) Explain the N-Tier architecture. Explain the entity bean briefly. 3 + 2

9.   Write short notes on any *four* from the following : $4 \times 3\frac{1}{2}$

   a)   E-SCM

   b)   Search Engine

   c)   Semantic web

   d)   ISP

   e)   Java applet life cycle

   f)   SAX Parser

   g)   Message Driven Bean

   h)   JSP life cycle.

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