

(i) Printed Pages: 2

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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B.A./B.Sc. (General) 4th Semester

1059

INFORMATION TECHNOLOGY

Paper—B : Data Networks and Web Based Applications

Time Allowed : Three Hours]

[Maximum Marks : 65

Note :— Attempt *five* questions in all by selecting *one* question from each Section. Entire question number 9 is compulsory.

SECTION—A

1. (a) What is Topology ? Explain various topologies with their merits and demerits.
(b) What are the various layers in OSI Reference Model ? Explain the need for each of them. 6,7
2. (a) Name any two search engines and compare their features.
(b) Explain commonly used tags for creating various elements within a Form. Create a Form where a user can submit his name, gender, hobbies and feedback using suitable elements. 6,7

SECTION—B

3. (a) What is the use of Class selector in CSS ? Illustrate with an example.
(b) Describe any two looping control constructs used in JavaScript. 6,7
4. (a) What is Event Handling ? Explain the use of any three events with examples.
(b) Describe briefly about JavaScript arrays and strings. 6,7

SECTION—C

5. (a) Explain 'switch' control construct used in Java. Write Java code for taking user input for two numbers and apply arithmetic operations on these numbers using 'switch' statement.
- (b) What is a Constructor ? What is their usage ? Explain different types of constructors with examples. 6,7
6. (a) What is Method Overloading ? Describe the situations in which overloading should be used.
- (b) What is Inheritance ? Explain various types of inheritance available in Java. 6,7

SECTION—D

7. (a) What is CLASSPATH ? How is it set ?
- (b) How an interface is created and used in Java ? Give examples. 6,7
8. (a) Explain the use of multiple try...catch clauses in exception handling. Give examples.
- (b) What is Multithreading ? Explain the life cycle of a thread with a neat diagram. 6,7
9. Write short answers (Entire question is compulsory) :
- (i) Explain any three attributes of tag.
- (ii) What is the role of JVM in Java ?
- (iii) What is method overriding ?
- (iv) Differentiate between throw and throws.
- (v) Name the methods used in the life cycle of an Applet.
- (vi) What is Synchronization ?
- (vii) What is URL ? 6×2+1