B.A./B.Sc. (General) 3rd Semester 1125

COMPUTER APPLICATIONS Paper—A: Web Based Applications

Time Allowed: Three Hours] [Maximum Marks: 65

Note: Attempt five questions in all, selecting one each from Section

A, B, C and D question IX is compulsory.

SECTION-A

- I. Explain the following:
 - (a) Types of computer networks
 - (b) Network hardware
 - (c) Sending data through forms in HTML. 4,4,5
- II. (a) What is URL? Why is it used? Explain different components of URL.
 - (b) What do you mean by style sheets? What are different types of style sheets? Explain giving an example showing precedence of style sheets. 4,9

SECTION-B

- III. (a) What are events? Explain the term 'Event Handling'. Write a program in Java script that adds two numbers when add button is pressed.
 - (b) Write a program in Java showing overloading of constructors.

7,6

- IV. (a) What are string arrays? How are they different from normal integer arrays?
 - (b) Compare and contrast features of C++ and Java. 5,8

SECTION-C

- V. (a) What are access specifiers? Differentiate between private and protected members of a class. Discuss these in relation to their accessibility outside the class and inheritance.
 - (b) What is an Interface? Write a program in Java showing use of interface in a Java program. Also explain the steps of your code.7,6

VI. Explain in detail:

- (a) Dynamic method dispatch
- (b) Calling constructors of super class
- (c) Try and catch clauses
- (d) Importing packages and their use.

3,3,3,4

SECTION-D

- VII. (a) What do you mean by thread synchronization? How is it achieved? Give example.
 - (b) What are applets? How are these different from applications?
 - (c) What are I/O streams? How are these helpful in input and output of data? 5,4,4
- VIII. (a) How can threads be implemented in a Java program? What is the use of runnable interface in multi threading?
 - (b) Write a program that reads a character form console and displays its ASCII code. 7,6

(Compulsory Question)

- IX. (a) What is WWW?
 - (b) What are lists? What are its types?
 - (c) What are client side objects?
 - (d) Write a note on JVM.
 - (e) What are packages? Give one example.
 - (f) What are abstract classes?
 - (g) What is inter-thread communication?