B.Sc. (Part—II) Semester—III Examination

3S-COMPUTER SCIENCE/COMPUTER APPLICATION/INFORMATION TECHNOLOGY

(Object Oriented Programming with C++ and Web Technology)

Time : Three Hours] [Maximum Marks : 80

Note :— (1) **ALL** questions are compulsory.

(2) Question No. **1** carries **8** marks and all other questions carries **12** marks.

(3) Assume suitable data wherever necessary.

1. (a) Fill in the blanks :

(i) _____ is the way of binding data and its associated functions together.

(ii) _____ is a function used to destroy the object of class.

(iii) OSI stands for _____.

(iv) An external style sheet may be linked to an HTML document through _____tag. 2

(b) Choose the correct alternative :

(i) The variables which are declared within the class are called as :

(a) Objects

(b) Method of Class

(c) Data Members

(d) Public

(ii) The function which calls itself is called _____ function.

(a) Inline

(b) Overloaded

(c) Recursive

(d) Main

(iii) The tag is used to insert the image :

(a) <Img>

(b)

(c) <A>

(d) None of the above

(iv) Topology can be created by combining two or more types of topologies :

(a) Network

(b) Hybrid

(c) Ring

(d) LAN 2

(c) Answer in one sentence :

(i) What is object ?

(ii) What is friend function ?

(iii) What is LAN ?

(iv) What is Style-Sheet ? 4

2. (a) Explain the user defined data types in C++. Give example. 6

(b) Explain the structure of C++ Program. 6

OR

3. (a) Explain the following :

(i) Variable

(ii) Identifiers. 6

(b) Define object-oriented programming. 6

4. (a) Explain the relational and logical operators with example. 6

(b) What is function overloading ? Explain the concept of function overloading with suitable example. 6

OR

5. (a) Write a program to find factorial of given number using do-while loop. 6

(b) Explain if-else structure with suitable example. 6

6. (a) Explain :

(i) Data Encapsulation

(ii) Data Hiding. 6

(b) What is constructor ? What are its advantages and disadvantages ? 6

OR

7. (a) Explain defining the member function inside and outside the class with example. 6

(b) What is destructor ? How it can be defined ? 6

8. (a) Explain OSI model. 6

(b) Explain the concept and goal of networking. 6

OR

9. (a) Explain the star and hybrid networks with advantages and disadvantages. 6

(b) Explain difference between LAN and WAN. 6

10. (a) What is HTML ? What are the advantages of HTML ? 6

(b) Explain <MARQUEE> and <A> tag with example. 6

OR

11. (a) Explain the following tags with example :

(i) <HTML>

(ii) <HEAD>

(iii) <TITLE>. 6

(b) Write a HTML code for the following output :

Programming Languages :

(1) C

(2) C++

(3) Java

(4) C#. 6

12. (a) What is CSS ? Explain border and display properties of CSS. 6

(b) Explain the class and ID attributes with suitable example. 6

OR

13. (a) Explain font and color properties of CSS. 6

(b) What is style sheet ? Explain the application of a style-sheet. 6