AW–1695

B.Sc. Part-II (Semester-III) Examination
COMPUTER SCIENCE/COMPUTER APPL./INFORMATION TECHNOLOGY (OLD)
(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 carry **12** marks each.

(3) Assume suitable data wherever necessary.

1. (A) Fill in the blanks :   2

    (i) The functions declared inside a class are known as _____.

    (ii) Which among the operator _____ is not associated with pointer.

    (iii) _____ layer is responsible for transmitting raw bit stream over the physical cable.

    (iv) _____ tag is used to define the documents body.

   (B) Choose the correct alternative from the following :   2

    (i) The insertion operator "<<" is also called as _____.

       (a) get from   (b) get to

       (c) put to   (d) put from

    (ii) The following preprocessor is used to define a symbolic constant.

       (a) # include   (b) # define

       (c) # error   (d) # if

    (iii) A _____ is a network that connects users across large distances.

       (a) MAN   (b) LAN

       (c) WAN   (d) PAN

    (iv) _____ property is used to set font family for text displayed in page.

       (a) Bold   (b) Color

       (c) Image   (d) Font

   (C) Answer in **ONE** sentence each :   4

    (i) What is Class ?

    (ii) What is Function ?

    (iii) What is Stylesheet ?

    (iv) What is Network ?

2. (A) Define variable. Explain the dynamic initialisation of variable with example.   6

   (B) Explain the structure of C++ with example.   6

OR

3. (A) Explain the following :   6

      (i)   Keywords

      (ii) Identifiers.

   (B) Write features and advantages of OOPS.   6

4. (A) Explain function prototype with example.   6

   (B) Explain scope resolution operator with example.   6

<div align="center">OR</div>

5. (A) Explain the concept of function overloading with suitable example.   6

   (B) Differentiate while and do...while statement with example.   6

6. (A) Explain the concept of accessing class member with example.   6

   (B) Explain friend function with example.   6

<div align="center">OR</div>

7. (A) Explain the purpose and use of destructor with suitable example.   6

   (B) Explain nesting of member function with example.   6

8. (A) Explain in brief the OSI reference model.   6

   (B) Explain star topology with its advantages and disadvantages.   6

<div align="center">OR</div>

9. (A) Explain multipoint network.   6

   (B) Explain the modes of data transmissions.   6

10. (A) Explain the need and application of HTML.   6

   (B) Explain the following tags of HTML :   6

      (i) < LINK >

      (ii) < IMG >

<div align="center">OR</div>

11. (A) Explain the following with example :   6

      (i) < ROWSPAN >

      (ii) < MARQUEE >

   (B) Explain the Anchor tag < A > with suitable example.   6

12. (A) Explain classes and ID attributes.   6

   (B) Explain the following properties of CSS :   6

      (i) Margin

      (ii) Border.

<div align="center">OR</div>

13. (A) What is stylesheet ? Write the application of stylesheet.   6

   (B) Explain the concept of CSS with HTML.   6