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AO—359—2018

FACULTY OF SCIENCE

B.Sc. (Second Year) (Third Semester) EXAMINATION

MARCH/APRIL, 2018

(CBCS Pattern)

COMPUTER SCIENCE

(Optional)

Paper VII

(Programming in C++)

(MCQ+Theory)

(Thursday, 3-5-2018)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

N.B. :— (i) All questions are compulsory.

(ii) Figures to the right indicate full marks.

(iii) Assume suitable data wherever necessary.

(iv) Draw neat labelled diagram wherever necessary.

(MCQ)

1. Attempt the following :

10

(1) Which of the following is not a member of class ?

(a) Static function

(b) Const function

(c) Friend function

(d) Virtual function

(2) Which of following terms is used for a function defined inside a class ?

(a) Member variable

(b) Member function

(c) Classic function

(d) Class function

P.T.O.

- (3) Which of the following concepts of oops means exposing only necessary information to client ?
- (a) Data hiding (b) Data binding
(c) Abstraction (d) Encapsulation
- (4) Which of the following cannot be friend ?
- (a) Function (b) Class
(c) Operator function (d) Object.
- (5) A class is called when an object is destroyed.
- (a) Constructor (b) Assignment Function
(c) Destructor (d) Copy Constructor
- (6) Which of the following functions types of function cannot be overloaded ?
- (a) Member function (b) Virtual function
(c) Static function (d) Both (b) and (c)
- (7) Which of the following access specifiers is used in class definition by default ?
- (a) Protected (b) Public
(c) Friend (d) Private
- (8) Which of the following is also known as instance of class ?
- (a) Object (b) Friend function
(c) Member variable (d) Member function
- (9) Which of the following provides a reuse mechanism ?
- (a) Abstraction (b) Dynamic binding
(c) Inheritance (d) Encapsulation

(10) Which of the following statements is *correct* ?

- (a) Class is instance of object
- (b) Class is instance of data type
- (c) Object is instance of data type
- (d) Object is instance of class

(Theory)

2. (a) Write a program in C++ to find maximum from three numbers. 10

Or

(b) Explain the structure of C++ program. 5

(c) What is loop ? Explain while loop with example in C++. 5

3. (a) Write a program in C++ to read the value of a , b and c and display the value of x where, 10

$$x = a/b - c$$

Or

(b) Explain inline function with suitable example. 5

(c) How is member function of a class defined ? 5

4. (a) Write a program in C++ to generate the prime number of n numbers of term ? 10

Or

(b) What is inheritance ? Explain hybrid inheritance. 5

(c) What is operator overloading ? Discuss overloading unary operators. 5