

AE-1316

B.C.A. New Course (Part - II)
Term End Examination, 2016-17

OBJECT ORIENTED PROGRAMMING USING C++

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 33

Note : Answer **all** questions. The figures in the right-hand margin indicate marks.

1. [A] Choose the correct answer of the following : $1\frac{1}{2} \times 10$
- (a) Which of the following concepts means wrapping up of data and functions together ?
- (i) Abstraction
- (ii) Encapsulation
- (iii) Inheritance
- (iv) Polymorphism
- (b) Which of the following operator is overloaded for object cout ?
- (i) $>>$ (ii) $<<$
- (iii) $+$ (iv) $=$

(2)

- (c) Which of the following is the correct class of the object cout ?
(i) iostream (ii) istream
(iii) ostream (iv) ifstream
- (d) Which of the following problem causes an exception ?
(i) Missing semicolon in statement
(ii) A problem in calling function
(iii) A run time error
(iv) None of the above
- (e) A void pointer cannot point to which of the following :
(i) Methods in C++
(ii) Class member in C++
(iii) Both (i) and (ii)
(iv) None of the above
- (f) The destination statement for the go to label is identified by what label ?
(i) \$ (ii) @
(iii) * (iv) :
- (g) Which other keywords are also used to declare the class other than class ?
(i) Struct
(ii) Union
(iii) Object
(iv) Both (i) and (ii)

(3)

- (h) Which keyword is used to define the macros in C++ ?
- (i) Macro
 - (ii) Define
 - (iii) # define
 - (iv) None of the above
- (i) What does a class can hold ?
- (i) Data
 - (ii) Functions
 - (iii) Both (i) and (ii)
 - (iv) None of the above
- (j) How many ways of passing a parameter are there in C++ ?
- (i) 1 (ii) 2
 - (iii) 3 (iv) 4

[B] Define any **two** of the following : 5×2

- (a) Template
- (b) Polymorphism
- (c) Pointer to an array

Unit - I

2. Explain the following : 15

- (a) Data types in C++
- (b) Constants

OR

Write a program to demonstrate the use of Relational Operator.

(4)

Unit - II

3. Write a program to demonstrate the use of do-while loop. 15

OR

Explain array of structures with suitable example.

Unit - III

4. Write a program to demonstrate the use of 'this' pointer. 15

OR

Explain copy constructor with suitable example.

Unit - IV

5. What is Function Overloading ? Explain the rules for overloading. 15

OR

Write a program to demonstrate the use of binary operator overloading.

Unit - V

6. Explain exception handling with the help of suitable example. 15

OR

Define Virtual Function. Explain rules for virtual functions. Write a program to demonstrate virtual function.