



AF-3130

PGDCA (Part - I)
Term End Examination, 2017-18

Paper - IV

Programming Using C and C++

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 40

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

1. [A] Answer the following : 2×10

- (a) C++ is an language.
- (b) The format identifier “%S” is used for data type in ‘C’.
- (c) FOR statement is used in ‘C’ program for
- (d) In C++, a function contained within a class is called a class function.

(T/F)

(2)

- (e) With objects we can access the public member of a class using a dot operator. (T/F)
- (f) C++ provide a special member function called which enable an object to initialize itself when it is created.
- (g) Operator overloading is called time polymorphism.
- (h) A mechanism of deriving a new class from an old class is called
- (i) A derived class with only one base class is called inheritance.
- (j) A virtual function, equated to zero is called a virtual function.

[B] Answer the following questions : 2×5

- (a) What are library functions ?
- (b) What is class ?
- (c) What is type casting ?
- (d) What is Destructor ?
- (e) What is hierarchical inheritance ?

Unit-I

2. What are Operators ? Explain the various types of operators used in 'C' . 14

OR

(3)

Write a ‘C’ program to calculate sum of two matrix using Array’s.

Unit-II

3. (a) Explain the concept of function overloading.
(b) Explain the concept of copy constructor.

14

OR

(a) What is inline function ?
(b) Write a program in C++ using friend function.

Unit-III

4. (a) What are strings in C++ ?
(b) Write a C++ program to create a class called STRING and implement the following :
(i) STRING S1 = “Korba”
(ii) STRING S2 = “C.G”
(iii) STRING S3 = S1 + S2

14

OR

Explain the following with example : 14

(a) Type conversions : Basic to Class
(b) Class to Class

(4)

Unit-IV

5. What is Abstract Class ? Explain with example. 14

OR

Write a program in C++ to implement multiple inheritance.

Unit-V

6. What is a file in C++ ? Explain the various types of file mode in C++. 14

OR

Explain the following :

- (a) Pointer to object
- (b) Pure virtual function
- (c) Pointer
