This question paper contains 2 printed pages

B.C.A. (Part - II) Roll No.....

236 (A) Obj. Ori. Pro. Con.

B.C.A (PART - II) EXAMINATION - 2018

(Faculty of Science)

(Three - Year Scheme of 10+2+3 Pattern)

Paper - 236 (A)

Object Oriented Programming Concepts (Through C + +)

Time Allowed : Three hours

Maximum Marks : 100

Question paper consists of three Parts. All THREE Parts are compulsory.

Part I : (Very Short Answer) consist of 10 questions of two marks each with two questions form each unit. Maximum limit for each question is up to 40 words.

Part II: (Short answer) consists of 5 questions of four marks each with one question from each unit. Maximum limit for each question is up to 80 words.

Part III: (Long answer) consists of 5 questions of twelve marks each with one question from each unit with internal choice.

PART - I

1. Attempt all the questions **(10 x 2 = 10)**

(a). What is an inline function?

(b) What is the difference between function overloading and function overriding?

(c) Why do we need the preprocessor directive #include <iostream> in C++?

(d) What do you mean by type casting?

(e) List the characteristics of a friend function.

(f) Give any four applications of OOPS.

(g) List out any four operators that cannot be overloaded.

(h) What is meant by Abstract base class?

(i) What is the difference between actual and formal parameters?

(j) What are Exceptions? Write any four exceptions of C++.

PART - II

2. Attempt all the questions **(5x4=20)**

(a) Compare object oriented programming with procedure oriented programming.

(b) Explain all the data types available in C++.

(c) Define copy constructor.

(d) List the types of inheritances. Write a C++ program to implement single inheritance.

(e) Explain the use of if stream and of strea m classes for file input and output.

PART III

3. Explain the following concepts of object oriented programming in detail with an example

(i) Data abstraction (ii) Inheritance

(iii) Polymorphism (iv) Objects (4 x 3 = 12)

OR

State the important features of object oriented programming. (12)

4. Explain all the looping statements available in C++. (12)

OR

Write Short Note on: (3x4 = 12)

(i) C++ tokens

(ii) Jumping Statements

(iii) Array

5. List out the rules for defining constructor with appropriate example. (12)

OR

Write a short note on access specifiers in C++. (12)

6. Write a C++ program to illustrate multiple inheritace. (12)

OR

Explain with an example the order of invocation of constructors and destructors in multiple inheritance. (12)

7. Define exception handling. Explain with example the use of try, catch and throw for exception handling in C++. (12)

OR

What is class template? Write the syntax for class template. Write an example program for class template. (12)