236(A)

B.C.A. (Part - II)

B.C.A. (Part - II) EXAMINATION, 2017
(Faculty of Science)
(Three-year scheme of 10 + 2 + 3 Pattern)
Paper - 236 - A
OBJECT ORIENTED PROGRAMMING CONCEPTS (Through C++)

Time : Three Hours]   *[Maximum Marks : 100*

Answer of all the questions (short answer as well as descriptive) are to be given in the main answer-book only. Answers of short answer type questions must be given in sequential order. Similarly all the parts of one question of descriptive part should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book. Write your roll numbers on question paper before start writing answers of questions.

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

PART I: *(Very Short Answer) consists of 10 questions of two marks each. Maximum limit for each question is up to 40 words.*

PART II: *(Short Answer) consists of 5 questions of four marks each. Maximum limit for each question is up to 80 words.*

PART III: *(Long answer) consists of 5 questions of twelve marks each with internal choice.*

PART - I

1. a) What are objects?
   b) What is a class?
   c) What is Data abstraction?
   d) What are Tokens?
   e) What are keywords?
   f) What are data members and member functions?
   g) Define Inline Function?
   h) What is Derived class?
   i) What is File?
   j) Define Templates?

[10 × 2 = 20]

PART - II

2. a) What is functional programming?

    b) Define Pointer with suitable example?

    c) What are Friend Functions? Write the syntax of Friend Function?

    d) Write short notes on virtual base class?

    e) What are streams?

                                                            [5 × 4 = 20]

PART - III

3. Define OOPs? Describe characteristics of OOPs.   [12]

                            OR

    Describe object and class concept in detail?   [12]

4. Describe Array in C++ in detail?   [12]

                            OR

    What are operators? Explain its types.   [12]

5. What is Constructor and Destructor? Explain various types of Constructor. [12]

                            OR

    Write short notes on:-   [2 × 6 = 12]

    a) Member Function.

    b) This Pointer.

6. Explain the concept of polymorphism in detail? [12]

                        OR

Define Inheritance? Explain various types of Inheritance. [12]

7. Define File system in C++? Describe basic operations of file system with suitable example. [12]

                        OR

Define Exception Handling? Describe Exception Handling with suitable example. [12]

x   x   x