

**206/236-A**

**B.C.A. (Part-II) EXAMINATION – 2018**

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

**OBJECT ORIENTED PROGRAMMING CONCEPTS (Through C++)**

Time Allowed: Three Hours

Maximum Marks: 100

Answers 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 number 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 10 questions of two marks each with two questions from each unit. Maximum limit for each question is up to 40 words.

**Part - II** (short answer) consists 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 5 questions of twelve marks each with one question from each unit with internal choice.

**Part – I**

**Attempt all questions. Each question carries 2 marks.**

**10 x 2=20**

1. (i) What is inline function?
- (ii) What is different between function overloading and function overriding?
- (iii) Why do we need the preprocessor directive `#include<iostream>` in C++.
- (iv) What do you mean by type casting?
- (v) List the characteristics of a friend function?
- (vi) Give any four applications of oops.

- (vii) List out any four operators that cannot be overloaded.
- (viii) What is meant by abstract base class?
- (ix) What is the different between actual and formal parameter?
- (x) What are exceptions? Write any four exceptions of C++.

### **Part – II**

**Attempt all questions. Each question carries 4 marks.**

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|----|--|---|
| 2. | Compare object-oriented programming with procedure-oriented programming.             | 4 |
| 3. | Explain all the data type available in C++.  | 4 |
| 4. | Define copy constructor.   | 4 |
| 5. | List the types of inheritances. Write a C++ program to implement single inheritance. | 4 |
| 6. | Explain the use of ifstream and ofstream class for file input and output.            | 4 |

### **Part – III**

- |    |   |    |
|----|---|----|
| 7. | Explain the following concepts of object oriented programming in the detail with explain. | 12 |
|    | OR  |    |
|    | State the important features of objected programming.                                     | 12 |
| 8. | Explain all the looping statement available in C++.                                       | 12 |
|    | OR  |    |
|    | Write short note on:  |    |
|    | a. C++ tokens   | 12 |
|    | b. Jumping statements   |    |
| 9  | List out the rules for defining constructor with appropriate example                      | 12 |
|    | OR  |    |
|    | Write short notes on access specifies in C++.   | 12 |

10 Write a C++ program to illustrate multiple inheritances. 12

OR

Explain with an example the order of constructors and destructor in multiple inheritances. 12

11 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

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