

**B.C.A. (Part - II)**

**Obj.Ori.Pro.Con.**

**206/236-A**

**B.C.A. (Part - II) EXAMINATION, 2021**

(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 of **10** questions of **two** marks each. Maximum limit for each question is upto **40** words.

**PART - II :** (Short answer) consists of **5** questions of **four** marks each. Maximum limit for each question is upto **80** words.

**PART - III :** (Long answer) consists of **5** questions of **twelve** marks each answer **one** question from each unit, each question is with an internal choice.

**PART - I**

1. Attempt **all** the questions.

10x2=20

- ~~(a)~~ What is OOP ?
- ~~(b)~~ Write any two advantages of OOP.
- ~~(c)~~ What do you mean by type conversion ?
- (d) What is ternary operator ?
- (e) What is 'this' pointer ?
- (f) What is member data and member function ?
- ~~(g)~~ What is Inheritance ?
- (h) What is late binding ?
- ~~(i)~~ What is binary file ?
- ~~(j)~~ What is template ?

**PART - II**

Attempt **all** the questions.

5x4=20

- ~~2.~~ Explain in brief evolution of OOP.
- 3. What is an expression ? Explain logical expression with example.
- ~~4.~~ What is access specifiers ? Explain each.
- 5. What is pure virtual function ? Explain with example.
- 6. What is function template ? Write the syntax with example.

**PART - III**

7. What is user define data type in C++ ? Explain the various user define data type in C++. **2+10**  
**OR**  
What are the basic concepts of OOPs language ? Explain each. **12**
8. Explain the various types of jumping statements in C++ with example. **12**  
**OR**  
Write a C++ program read n values into array find sum and average using pointer with function. **12**
9. How to define member functions of a class ? Explain with example. **12**  
**OR**  
What is friend function ? What are the general characteristic of friend function ? Write a C++ program calculate factorial value using friend function. **3+4+5**
10. Write a C++ program to demonstrate multiple inheritance, assume suitable data or (data member) for defining classes. **12**  
**OR**  
What is operator overloading ? Explain with suitable example. **4+8**
11. Explain the various file stream classes used in C++. **12**  
**OR**  
What is exception ? How many types of exception ? How to handle exception in C++ ? Explain. **2+2+8**

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