Roll No.

Total No. of Printed Pages : 4 Annual Online Examination 2021 Code No. : A.B.C-293

B.C.A. Part II PROGRAMMING IN C++

Paper III

[Programming in C++]

Time : Three Hours]

[Maximum Marks : 80

Total No. of Sections : 3

Note: Section 'A' containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

Section 'A'

Answer the following Very Short Answer TypeQuestions in one or two sentences.1×10=10

- 1. Define a class in object oriented programming.
- **2.** What is static polymorphism ?
- **3.** What do you mean by a function in C++ ?
- 4. What is actual argument of a function.
- 5. What is the use of new keyword in C++ ?

Code No. : A.B.C-293

- **6.** What is the use of destructor of a Class ?
- 7. What is this pointer ?
- **8.** What is multiple inheritance in C++ ?
- 9. What is the use of operator keyword ?
- 10. Define abstract class.

Section 'B'

Answer the following Short Answer Type Questions in about 150-200 words : $4 \times 5 = 20$

1. Write the applications of OOP.

Or

What is operator ? Explain logical operator and relational operator of C++.

2. Explain method overloading in C++ with suitable example.

Or

Write a C++ program to implement of call by value and call by reference.

3. Define constructor overloading and explain with suitable example.

Code No. : A.B.C-293

Or

Explain the use of new and delete keyword in C++.

4. Explain public, private and protected access specifier.

Or

Explain this pointer with example.

5. Explain dynamic and static polymorphism with example.

Or

Discuss about operator overloading in brief.

Section 'C'

Answer the following Long Answer Type Questions in about 300-350 words : 10×5=50

1. Explain various features of object oriented paradigm.

Or

What are the looping statements in C++ ? Differentiate between while loop and do-while loop. Write a program to explain it.

2. What is inline function ? What are its uses ? Explain with suitable example.

Or

Explain passing structure to a function using C++ program.

[3] P.T.O.

Code No. : A.B.C-293

3. Differentiate between constructor and destructor. Write a C++ program to demonstrate it.

Or

What do you mean by dynamic memory allocation ? How we can achieve in C++ ? Explain.

4. What is multilevel inheritance in C++ ? In which sequence the constructor of the derived classes and super classes will execute in multilevel inheritance in C++ ? Explain.

Or

Explain the following term :

- (a) Pointer to pointer,
- (b) Pointer to object.
- 5. Write short notes on :
 - (a) Overloading unary operators,
 - (b) Virtual function.

Or

What is friend function ? How we can use friend function in C++ ? Explain.

[4] **4/50**