Roll No. Total

Code No. : BC-293

Online Annual Examination, 2022

B.C.A. Part II

Paper III

PROGRAMMING IN C⁺⁺

Time : Three Hours] [Maximum Marks : 80

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 type questions in one or two sentences. $1 \times 10 = 10$

- **1.** Explain Oops by definition.
- 2. C⁺⁺ is which type of programming language.
- **3.** Write only the name of all data types which are supported by C^{++} .

Code No. : BC-293

- 4. Which operator can not be overload ?
- **5.** How many types of errors found in C^{++} ?
- 6. Define Polymorphism.
- 7. Define friend class and friend function.
- 8. Which data type can be used to hold a wide character in C^{++} ?
- 9. Define constructor.
- 10. Define class and object.

Section 'B'

Answer the following short answer type questions with word limit **150-200**. Attempt any five questions.

$4 \times 5 = 20$

- 1. Explain all types of operators in brief.
- **2.** Describe control structure using example of while and do while.
- **3.** Write a program to generate odd number series for *n* steps.
- 4. Explain in line function in brief.
- **5.** Describe constructor and destructor with suitable example of program.

Code No. : BC-293

- 6. Explain pointer and this pointer.
- 7. Define virtual and pure virtual function.
- **8.** Explain any *one* type of inheritance by suitable example of program.

Section 'C'

Answer the following long answer type questions with word limit 300-350. $10 \times 5 = 50$

Unit-I

1. Write a program to show the implementation of switch case.

Or

Differentiate between equal to (= =) and assignment (=) ? operator.

Unit-II

2. Explain structure of C^{++} .

Or

Write short notes on the following :

(i) Inline function

(ii) Overloaded function.

[3]

P. T. O.

Code No. : BC-293 Unit-III

3. Describe memory allocation method.

Or

Explain constructor and their advantages.

Unit-IV

- 4. Write short notes on the following :
 - (i) Inheritance
 - (ii) Access specifier.

Or

Write a program to check given no is prime or not, using pointer.

Unit-V

- 5. Write short notes on the following :
 - (i) Abstract class
 - (ii) Virtual function.

Or

Explain binary operator overloading.

[4]