Third Semester B.C.A. Degree Examination, November/December 2019

(CBCS Scheme)

Computer Science

Paper 303 T - OBJECT ORIENTED PROGRAMMING USING C++

Time : 3 Hours]   *[Max. Marks : 70*

Instructions to Candidates : Answer ALL questions.

SECTION – A

Annotate any **TEN**. Each question carries **2** marks :   **(10 × 2 = 20)**

1. State any four differences between C and C++.

2. What is scope resolution operator?

3. Why do we require const qualifier?

4. What is function prototype?

5. Define constructor.

6. List out the operators which cannot be overloaded.

7. Define inheritance.

8. Explain dynamic binding.

9. Define friend function.

10. What is an exception?

11. Define stream.

12. Differentiate between seekg ( ) and seekp ( ) function.

SECTION – B

Answer any **FIVE** questions. Each question carries **10** marks : **(5 × 10 = 50)**

13. (a) Explain basic concepts of oops in detail. **(5)**

    (b) What is an inline function? Write an inline function to find absolute value of a number. **(5)**

14. (a) Explain function overloading with examples. **(5)**

    (b) Describe types of constructors in detail. **(5)**

15. (a) Demonstrate the usage of classes and objects with an example. **(5)**

    (b) Explain the concepts of static members of a class with example. **(5)**

16. (a) Write a program to perform addition of two matrices using operator overloading. **(5)**

    (b) Explain data conversions in detail. **(5)**

17. Explain various types of inheritance with suitable examples. **(10)**

18. (a) What is exception handling? Explain the different blocks in exception handling. **(5)**

    (b) Write about virtual functions in C++ with examples. **(5)**

19. (a) Explain types of templates. **(5)**

    (b) Write a program to show returning current object accessing number data of current object and returning values of object using this pointer. **(5)**

20. (a) Explain the unformatted I/O operations of streams. **(5)**

    (b) Explain file pointers and file modes. **(5)**

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