Reg. No. : ....

Name : ....

III Semester B.Sc. Degree CBCSS (OBE) Reg./Sup./Imp. Examination, November 2021
(2019 – 2020 Admission)
GENERAL AWARENESS COURSE IN COMPUTER SCIENCE
3A11 CSC : Programming in C++

Time : 3 Hours   Max. Marks : 40

PART – A

Short answer. Answer **all** questions.

1. What is an object ?

2. Define polymorphism.

3. What are pure virtual functions ?

4. Give an example for a unary operator.

5. What is I/O chaining or cascading of I/O operators ?

6. What is protected visibility mode ?   (6×1=6)

PART – B

Short essay. Answer **any six** questions.

7. Write two uses of scope resolution operator.

8. Differentiate dynamic binding and static binding.

9. How can you make an outside member function inline ? What are its restrictions ?

10. Write a program to demonstrate single inheritance.

11. Explain any two formatted console I/O operations.

12. Is it possible to nest classes ? If so, how ?

13. Create a class employee. Use parameterised constructors to initialise object.

14. What is function overloading ? Explain. (6×2=12)

PART – C

Essay. Answer **any four** questions.

15. Explain the structure of a C++ program.

16. Explain the memory management operators.

17. What is nesting of member functions ? Demonstrate.

18. What are reference variables ? Explain with an example.

19. Write a program to add two complex numbers using friend functions.

20. What is the use of this pointer ? (4×3=12)

PART – D

Long Essay. Answer **any 2** questions.

21. Explain static data members and static member functions.

22. Explain the following types of inheritance :
    1) Multiple
    2) Hierarchical.

23. What is a constructor ? Explain the different types of constructors in C++.

24. Write a program to read name, roll-number and marks of a list of students and to search for a student using an array of class. (2×5=10)

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