



K21U 2072

III Semester B.Sc. Degree (CBCSS – Sup./Imp.) Examination,
November 2021
(2015 – '18 Admissions)
GENERAL COURSE IN COMPUTER SCIENCE
3A11CSC : Programming with C++

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. **One Word Answer.** **(8×0.5=4)**
- a) Each string is terminated with a _____ character.
 - b) The process of insulating data from direct access by the program is called _____.
 - c) A preprocessor directive begins with a _____ symbol.
 - d) _____ is an instance of a class.
 - e) A _____ data member can be accessed only within the class and its derived classes.
 - f) _____ operator helps to define a function outside the class definition.
 - g) We cannot create objects for an _____ class.
 - h) The constructors that can take arguments are called _____.

SECTION – B

Write short notes on **any seven** of the following questions. **(7×2=14)**

- 2. What do you mean by polymorphism ? What are the different types of polymorphism available in C++ ?
- 3. What is a friend function ?
- 4. What is the difference between private and protected access specifiers ?
- 5. What do you mean by inheritance ?
- 6. Write a program in C++ to demonstrate return by reference.

P.T.O.



7. What do you mean by streams in C++ ?
8. What is the purpose of constructor ?
9. What are *const* member functions ?
10. Compare *continue* and *break* statements.
11. Differentiate between entry controlled and exit controlled loops.

SECTION – C

Answer **any four** of the following questions.

(4×3=12)

12. What are manipulators ?
13. Explain memory management operators in C++.
14. Compare call by reference and call by value.
15. Write the difference between overloading an operator using member function and friend function.
16. Explain the concept of virtual base classes.
17. With the help of an example, show how a derived class function can be accessed by using a base class object pointer.

SECTION – D

Write an essay on **any two** of the following questions.

(2×5=10)

18. Write an essay on the features of object oriented programming.
 19. Explain the concept of operator overloading with the help of suitable examples.
 20. Discuss unformatted I/O operations in C++.
 21. Describe various branching statements available in C++.
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