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# K15U 0330

III Semester B.Sc. Degree (CCSS – 2014 Admn. – Regular) Examination, November 2015 GENERAL COURSE IN COMPUTER SCIENCE 3A11CSC : Programming with C++

Time: 3 Hours

Max. Marks: 40

## SECTION – A (8×0.5=4)

- 1. One word answer :
  - a) Variables of a class are called \_\_\_\_\_
  - b) \_\_\_\_\_ is a variable which holds the address of another variable.
  - c) \_\_\_\_\_are class members that are hidden from the outside world.
  - d) Dynamic allocation of memory is done by \_\_\_\_\_\_ operator.
  - e) The operator and when placed before a variable returns
  - f) The \_\_\_\_\_\_ pointer stores the address of the object currently invoking a member function.
  - g) \_\_\_\_\_\_function takes objects as arguments.
  - h) \_\_\_\_\_ gives a new meaning to the existing C++ operators.

#### SECTION - B

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

- 2. What is a class ? Explain with an example.
- 3. Explain destructors with an example.
- 4. Compare "struct" and "class" keyword of C++.
- 5. Define the static members of a class.
- 6. What are the characteristics of friend function ?

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- 7. What is the difference between call by value and call by reference ?
- 8. Difference between goto and continue statement.
- 9. What is a pointer?
- 10. What are file modes ? Describe the various file mode options available.
- 11. What is a virtual function ?

#### SECTION-C

Answer any four of the following questions :

- 12. Explain the merits of OOPs over Structured Programming.
- 13. What is data abstraction ? How it is implemented in C++ ? Explain with example.
- 14. Explain inline function with example.
- 15. What is the benefit of copy constructor ? Justify your answer with example.
- 16. Write a program to find elder person using THIS pointer.
- 17. Explain function overloading with examples.

#### SECTION - D

Write an essay on any two of the following questions :

 $(2 \times 5 = 10)$ 

5. Define the static members of a class

 $(4 \times 3 = 12)$ 

- 18. Explain the basic concepts of Object Oriented Programming.
- 19. What is inheritance ? Explain the different kinds of inheritance with example.
- 20. Write about files in C++.
- 21. Explain operator overloading.