

NOVEMBER/DECEMBER 2018

**BSC21 — C++ AND DATA STRUCTURE**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. Name any two applications of Object Oriented Programming.
2. Define Token.
3. How to specify class?
4. Define derived classes.
5. Name any two inheritance supported in C++.
6. What is meant by stream classes?
7. Define stack.
8. What is spanning tree?
9. Convert the given expression  $A+B*C-D$  in to postfix form.
10. Define BFS.

SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) Explain the structure of Switch statement with example.

Or

- (b) Discuss on Inline function.

12. (a) Discuss on single inheritance with examples.

Or

- (b) What is the Virtual function? Explain.

13. (a) Explain the concept of Nesting of number function.

Or

- (b) Write short notes on copy constructor.

14. (a) Write a short notes on Linked stacks.

Or

- (b) Discuss about polynomial addition with example.

15. (a) Discuss about threaded binary tree with examples.

Or

- (b) Write a short notes on in-order traversal with examples.

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Write a program in C++ to find the average of ten numbers.

17. Briefly explain the function Overloading.

18. Explain any two inheritance with examples.

19. Explain about queue in detail.

20. Explain different way of representing the graph with neat diagram.