

18U233

(Pages: 2)

Name.....

Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2019

(CUCBCSS – UG)

CC15U BCS2 B02 – OOP CONCEPTS AND DATA STRUCTURES USING C ++

(Core Course: Computer Science)

(2015 & 2016 Admissions Supplementary)

Time: Three Hours

Maximum: 80 Marks

SECTION-A

Answer *all* questions. Each question carries 1 mark.

1. Wrapping up of data and methods together into a single unit is called _____
2. _____ concept is the implementation of polymorphism.
3. _____ and _____ are the two keywords used for dynamic memory allocation in C++.
4. Assuming int of 4bytes, what is the size of int arr[10]:?
5. List out the two ways in which we could represent an array in memory.
6. When the last element is pointed to the first element in a queue, that type of queue is called _____
7. Dequeue is the deletion operation from the queue. True or False.
8. Inserting an element into a stack is called _____ and deleting from the stack is called _____
9. Name any one non-linear data structure.
10. List out any two collision resolution techniques in hashing.

(10 x 1 = 10 Marks)

SECTION-B

Answer *all* questions. Each question carries 2 marks.

11. What is an inline function?
12. What is a virtual base class?
13. What is an abstract class?
14. What is a copy constructor?
15. What is hashing?

(5 x 2 = 10 Marks)

SECTION C

Answer any *five* questions. Each question carries 4 marks.

16. Write the algorithm for binary search.
17. Explain the different types of queue.
18. What are pointers? Explain pointers to objects.
19. Explain the difference between multilevel and multiple inheritance.
20. Explain the concept dynamic storage management.
21. Explain evaluation of expression with an example.
22. Explain friend function with an example.
23. Explain string manipulation functions with example.

(5 x 4 = 20 Marks)

SECTION-D

Answer any *five* questions. Each question carries 8 marks.

24. What is an array data structure? Explain the operations that could be done on arrays.
25. Explain the different types of sorting in detail using examples.
26. Define a linked list. Elaborate on the types of linked lists.
27. What are files? Elaborate on the different file handling functions.
28. What is a queue data structure? Explain enqueue and dequeue operations.
29. What are constructors? Explain the different types of constructors.
30. Explain the basic concepts of object oriented principles.
31. Explain the concept of operator overloading with suitable example.

(5 x 8 = 40 Marks)
