DS-003-004201 Seat No. _____

B. Sc. (I.T.) (Sem. II) (CBCS) Examination

April / May – 2015

CS-07 : Advance C & Data Structure

Faculty Code : 003
Subject Code : 004201

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

1. Which symbol is use for pointer?

(A) **
(B) &
(C) *
(D) *&

2. Which operator is use for pointer to structure?

(A) .
(B) *
(C) ->
(D) &

3. struct stud

```
{
        Int rno;
        Char name [20];
} s;
```

Where rno is--------?

(A) Variable
(B) member variable
(C) tag name
(D) operator

4 DMA stand for?

(A) Direct memory address.
(B) Dynamic Memory allocation
(C) Dynamic memory address
(D) Derived memory address

5. **Finding the location of the element with given value is?**

(A) Traversal

(B) Sort

(C) Search

(D) None

6. **To rearrange the subscript value is known is?**

(A) Traversal

(B) Search

(C) Sort

(D) None

7. **Merge sort means.**

(A) Combine sorted array

(B) Sort array

(C) Both A & B

(D) None

8 **What is the example of UDF?**

(A) main ()

(B) scanf ()

(C) printf ()

(D) all

9 **Which is non-linear data structure?**

(A) Stack

(B) Tree

(C) Queue

(D) Array

10. **When we pass arguments (*, *) that means?**

(A) Call by value

(B) Call by reference

(C) Both

(D) None

11. **When one function call other function that is known as?**

(A) Recursive

(B) Itself call

(C) Nested function

(D) None

12. **Deletion into in stack is known as?**

(A) Push

(B) Peep

(C) Pop

(D) Delete

13. **The data structure required to evaluate a prefix and postfix expression using.**

(A) Stack

(B) Queue

(C) Linked list

(D) Tree

14. **Which relationship is maintained between elements in Tree?**

(A) Hierarchical

(B) Hybrid

(C) Multiple

(D) Multilevel

15. **In preorder traversal the first data will be display?**

(A) Root

(B) Left

(C) Right

(D) None

16. **Which data structure elements can be added or removed at either end.**

(A) Deque

(B) Stack

(C) Tree

(D) all

17. **How many types of function in c**

(A) 1

(B) 2

(C) 3

(D) 4

18. **Which keyword used to create aliases of existing data type?**

(A) enum

(B) typedef

(C) struct

(D) Union

19. **Which of the following is not a non-primitive data type?**

(A) Stack

(B) Queue

(C) Pointer

(D) Tree

20. **What is data structure?**

(A) Logical organization of data

(B) Physical organization of data

(C) Simple organization of data

(D) None

Q.2 [A] Attempt any three. **[06]**

1 What is pointer? Explain concept of it.
2 Explain void data type?
3 Explain Pointer to Structure?
4 Explain Array as a function argument?
5 Static Array vs. Dynamic Array.
6 Explain Recursion function with example.

Q.2 [B] Attempt any three. **[09]**

1 Explain all DMA function?
2 call by value vs call by reference.
3 Explain empty stack and overflow stack.
4 Explain Bubble sort with program.
5 Explain Quick sort with program.
6 Explain command line argument.

Q.2[C] Attempt any two. **[10]**

1 What is merge sort? Explain with program.
2 What is binary search? Explain with program.
3 Write a program for dynamic stack with all function?
4 Explain circuler queue with program?
5 Explain dynamic queue with example.

Q.3 [A] Attempt any three. **[06]**

1 Explain storage structure of array.
2 Explain fopen () and fclose () in file.
3 Explain all types of purpose in file.
4 Define Root Node. And Sub-tree.
5 What is double ended queue?
6 What is stack? Why stack is called "lifo"?

Q.3 [B] Attempt any three. **[09]**

1 Explain Binary tree.
2 Explain ftell (), rewind () and fseek ().
3 What is priority queue?
4 Explain polish notation in stack.
5 Explain quick sort with program?
6 Different between text file and binary file.

Q.3[C] Attempt any two. **[10]**

1 Explain doubly linked list with all function?
2 Explain Grounded header list with all function?
3 What is binary tree? Explain all traversal method.
4 What is data structure? Explain primitive and non primitive data structure.
5 List various Application of linked list.