

Science College, Congress Nagar, Nagpur

First Term Exam -2021-22

Subject-Computer Science (D9) Paper-I

Time:3.00 Hrs.

Class: XII

Marks:50

Q.1 A) Select correct alternative and rewrite the following. (4)

a) Accessing each element only once is called_____.

- i) Traversing ii) Searching iii) Inserting iv) Deleting

b) The elements in array are _____.

- i) Homogeneous ii) Non-Homogeneous iii) Equal iv) none of these

c) The free space list of block is_____.

- i) Memory map ii) Bit map iii) Block map iv) Array map

d) Window 98 is_____ Operating System.

- i) Single user multitasking ii) Multi user iii) Time sharing iv) None

B) Attempt any Two of the following. (6)

a) What is an Operating System. Explain its four components.

b) Explain Three major methods of allocating disk space.

c) What is Binary Tree? Explain with Example.

Q.2 A) Answer any Two of the following. (6)

a) Explain Security Threats.

b) What is linked list? Show a linked list with suitable example having five nodes with a properly labelled diagram.

c) Explain binary search algorithm with suitable example

B) Answer any one of the following. (4)

a) What is Control Structure? Also Explain three Types.

b) Explain Virtual Memory.

Q.3 A) Answer any two of the following. (6)

a) What is Linux? Explain its Features.

b) Explain the function of following.

- i) Program Manager ii) File Manager iii) Control Panel

c) What is Data Structure? Explain its Six Operations.

B) Answer any one of the following. (4)

- a) Explain Graphical user Interface? Also Draw the Fig. of Window.
- b) What is Partitioning? Also Explain Variable Partitions.

Q.4 A) Answer any two of the following. (6)

- a) Explain Paging and Segmentation.
- b) Explain Computer worms and Computer Virus.
- c) Explain bubble Sort algorithm with suitable example

B) Answer any one of the following. (4)

- a) Explain Process States? Explain Priority.
- b) Explain Disk-based System with Draw a well labelled Diagram.

Q.5 Answer any two of the following. (10)

- a) Write a program in C++ to print numbers from 10 to 30, which is not divisible by 5.
- b) Write a program in C++ to Print Fibonacci sequence. Create a class Fibonacci, use default constructor to initialize the member function Of the class, a function print to print the sequence.
- c) Write an HTML Code for following.

Year	Student		
	Boys	Girls	Total
2007	25	30	55
2008	80	25	105

OR

Q.5 Answer any two of the following. (10)

- a) Write a program in C++ to print table of any random number entering by user.
- b) Write a Program in C++ to check the year is Leap or not by using function.
- c) Write a code in HTML for following table:

Roll No.	Name	Marks		Total
		CS1	CS2	
1001	John	75	73	148
1002	Roman	85	90	175