

DAY - 13

SEAT NUMBER

003006

2015 III 12

1100

V - 634

(E)

COMPUTER SCIENCE

PAPER - I (D-9)

Time : 3 Hours

4 Pages

Max. Marks : 50

- Instructions :** (1) All questions are compulsory.
(2) Figures to the right indicate full marks.
(3)- Use of any type of calculator is not allowed.
(4) Draw a neat diagram wherever necessary.

1. (A) Select correct options from the following and rewrite sentences :
- (a) The time required to move R/W Head to the particular track is called _____ 1
- (i) Latency Time
(ii) Seek Time
(iii) Waiting Time
(iv) Response Time
- (b) _____ data structure does not require contiguous memory allocation. 1
- (i) Array
(ii) String
(iii) Pointer Array
(iv) Linked List
- (c) Object Oriented Programming uses _____ approach of Programming. 1
- (i) Linear
(ii) Non-linear
(iii) Top down
(iv) Bottom up

- (d) The valid attribute of <A> is _____ 1
- (i) NAME
 - (ii) SRC
 - (iii) BGCOLOR
 - (iv) HEIGHT

(B) Answer **any two** of the following :

- (a) What is Virtual Memory ? Explain any two elements of Virtual Memory. 3
- (b) What is Data Structure ? Define Array and Pointer Array in data structure. 3
- (c) Give function of following tags with an example of each : 3
 - (i)
 - (ii)
 - (iii) <DL>

2. (A) Answer **any two** of the following :

- (a) Give three differences between WORM and VIRUS. 3
- (b) Write an algorithm to find smallest element in an Array. 3
- (c) Define the following terms in C++ : 3
 - (i) Data Abstraction
 - (ii) Operator Overloading
 - (iii) Data Encapsulation

(B) Solve **any one** of the following :

- (a) What is System Call ? List any two System Calls for Memory Management, Process Management and Information Management. 4
- (b) What is Virtual Function in C++ ? Give any six rules to write Virtual Functions. 4

3. (A) Solve **any two** of the following :

- (a) Explain Multiuser and Time Sharing Operating Systems. 3
- (b) Define : 3
 - (i) Tree
 - (ii) Binary Tree
 - (iii) Extended Binary Tree.
- (c) What is Function Overloading ? Give examples of Function Overloading. 3

(B) Solve **any one** of the following :

(a) Write an algorithm for Binary Search Method. Explain algorithm with suitable example. 4

(b) What is Constructor and Destructor in C++ ? Give example of Constructor and Destructor in a class. 4

4. (A) Solve **any two** of the following :

(a) What is File System ? List and explain types of File Systems used in OS. 3

(b) With suitable example explain how tree can be represented in Memory ? 3

(c) What is Inheritance ? Explain any two types of Inheritances with Memory. 3

(B) Solve **any one** of the following :

(a) Give features of Windows 98 Operating System. 4

(b) What is Linked List ? How they can be represented in Memory ? 4

5. Solve **any two** of the following :

(a) Write a program in C++ to accept two integer values in main function, pass them to function great() using call by value and find greater number, function great() should not return any value. 5

(b) Write a program in C++ to accept three integers from keyboard and find greatest number with using Condition Control. 5

(c) Write output of the following HTML program : 5

```
<HTML>
  <HEAD> <TITLE> abc </TITLE> </HEAD>
  <body>
    <H1 align = "center"> KBC Restaurant </H1>
    <TABLE border = 2>
  <TR> <TH Rowspan = "2">
      <Font Size = "5"> Pawbhaji </font>
    </TH>
    <TH> with cheese </TH>
    <TH> 35
```

```

</TR>
  <TR>
    <TH> without cheese
    <TH> 25
  </TR>
</TABLE>
</Body>
</HTML>

```

RBC Pan. → 4

	with	35
Pan	with out	25

OR

5. Answer any two of the following :

- (a) Write a program in C++ to accept a string from keyboard and copy string into another string without using the Library Function. 5
- (b) Write a program in C++ to find area of circle using class. 5
- (c) Write a program in HTML for the following output : 5
- (i) Arts
- A. History
- B. Geography
- (ii) Science
- I. Computer Science
- II. Physics
- (iii) Commerce
- O English
- O Accounts