

DAY - 13

SEAT NUMBER

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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 _____.

- (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 : 3
- (a) What is Virtual Memory ? Explain any two elements of Virtual Memory.
 - (b) What is Data Structure ? Define Array and Pointer Array in data structure.
 - (c) Give function of following tags with an example of each :
 - (i)
 - (ii)
 - (iii) <DL>
2. (A) Answer **any two** of the following : 3
- (a) Give three differences between WORM and VIRUS.
 - (b) Write an algorithm to find smallest element in an Array.
 - (c) Define the following terms in C++ :
 - (i) Data Abstraction
 - (ii) Operator Overloading
 - (iii) Data Encapsulation
- (B) Solve **any one** of the following : 4
- (a) What is System Call ? List any two System Calls for Memory Management, Process Management and Information Management.
 - (b) What is Virtual Function in C++ ? Give any six rules to write Virtual Functions.
3. (A) Solve **any two** of the following : 3
- (a) Explain Multiuser and Time Sharing Operating Systems.
 - (b) Define :
 - (i) Tree
 - (ii) Binary Tree
 - (iii) Extended Binary Tree
 - (c) What is Function Overloading ? Give examples of Function Overloading.

(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>
```

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
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