

DAY - 13

SEAT NUMBER

0 0 3 0 0 6

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 :

(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">

 Pawbhaji

</TH>

<TH> with cheese </TH>

<TH> 35

</TR>

<TR>

<TH> without cheese

<TH> 25

</TR>

</TABLE>

</Body>

</HTML>

RBC Ran → 4

	with	35
Paw	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