DAY - 13 SEAT NUMBER | | | | | | |

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) <IMG>

(ii) <EM>

(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>
```

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

DAY - 13 SEAT NUMBER | | | | | | |

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) <IMG>

(ii) <EM>

(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>
```

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