

DAY - 16**SEAT NUMBER**

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2017**III****20****1100****V - 234****(E)**

**COMPUTER SCIENCE
PAPER - I (D-9)**

Time : 3 Hours**4 Pages****Max. Marks : 50**

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

1. (A) Select correct option from the following and rewrite sentence :

- (a) The time lost in turning the attention of processor from one process to another is called as _____. 1
- (i) Circuit Switching
(ii) Band Width
(iii) Context Switching
(iv) Packet Switching
- (b) A record is collection of _____. 1
- (i) Files
(ii) Arrays
(iii) Fields
(iv) Maps
- (c) If all visibility labels are missing then by default members of class are _____. 1
- (i) Public
(ii) Protected
(iii) Private
(iv) Void

- (d) _____ tag is used to put a line break in HTML Code. 1
- (i) <HR>
 - (ii)

 - (iii) <P>
 - (iv)
- (B) Answer **any two** of the following :
- (a) What is Friend Function ? Write any four characteristics of Friend Function. 3
 - (b) Explain in short the three special characteristic of a static data member in a class. 3
 - (c) Discuss Virus Detection, Virus Removal and Prevention Philosophies. 3
2. (A) Answer **any two** of the following :
- (a) Explain with flowchart the following control structure : 3
 - (i) Sequence Logic
 - (ii) Selection Logic
 - (iii) Iteration Logic
 - (b) Explain Bubble Sort Algorithm with suitable example. 3
 - (c) What functions are performed by Memory Management of Operating System ? State any four Memory Management System. 3
- (B) Answer **any one** of the following :
- (a) What is Operator Function ? Describe the syntax of an Operator Function. Explain the difference between Operator Function as the Member Function and Friend Function. 4
 - (b) With reference to process management. Explain the terms : 4
 - (i) External Priority
 - (ii) Purchased Priority
 - (iii) Internal Priority
 - (iv) Time Slice
3. (A) Answer **any two** of the following :
- (a) Write difference between Linear Search and Binary Search. 3
 - (b) Explain different types of inheritance with suitable diagram. 3
 - (c) How linked list are represented in Memory ? 3

(B) Answer any one of the following :

(a) Define the following terms with reference to Tree :

4

(i) Root

(ii) Leaf

(iii) Sibling

(iv) Depth

(b) What is Computer Virus ? What are the different method by which virus can infect other programs ?

4

4. (A) Answer any two of the following :

(a) With syntax diagram explain structure of HTML WebPage.

3

(b) Explain the concept of function overloading with example.

3

(c) Explain any three features of Windows-NT Operating System.

3

(B) Answer any one of the following :

(a) State the various steps involved in the allocation of partition in case of fixed partition memory management.

4

(b) Explain the use of Scope resolution Operator and Memory Management Operators in C++ with examples. <https://www.maharashtrastudy.com>

4

5. Solve any two of the following :

(a) Write a program in C++ to read a set of 10 numbers from keyboard and findout largest number in the given array.

5

(b) Write a program in C++ to find factorial of entered number.

5

(c) Write a code in HTML for following table :

5

Computer Science	Paper I	Paper II	Total
	100	100	200

OR

b.c

5. Solve any two :

- (a) Implement class GCD which have member function (a/c), which calculate greatest common divisor of two number entered during program execution. Print() will Print GCD of two number. 5
- (b) Write a C++ program to display a series of 15 term of the Fibonacci Series. 5
- (c) Write the exact output of the following HTML Code with font specification in bracket. 5

```
<html>
<title> Introduction </title>
<body>
<h1> <b> Computer Science </b> </h1>
<hr>
<u> Paper-I </u>
<hr>
<u> Paper-II </u>
</body>
</html>
```
