

DAY - 17

SEAT NUMBER

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2024

III

12

1100

V - 264

(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 not allowed.
 - (4) Draw a neat diagram whenever necessary.

1. Select the correct alternative and rewrite the sentence :

(a) _____ tag is used for scrolling the text on WebPage. 1

- (i) <Head>
- (ii)
- (iii) <MARQUEE>
- (iv) <SUP>

(b) _____ is a free operating system. 1

- (i) Unix
- (ii) Windows
- (iii) LINUX
- (iv) DOS

(c) _____ is a mechanism to achieve run time polymorphism. 1

- (i) Operator Overloading
- (ii) Virtual Function
- (iii) Function Overloading
- (iv) Constructor

- (d) Finding the location of given element is called as _____ . 1
- (i) Searching
 - (ii) Sorting
 - (iii) Traversing
 - (iv) Inserting
- (B) Answer any two of the following :
- (a) Explain the following components of GUI : 3
 - (i) Menu Bar
 - (ii) Scroll Bar
 - (iii) Title Bar
 - (b) Write three distinct differences between Array and Linked List. 3
 - (c) Write any three advantages and disadvantages of HTML. 3
2. (A) Answer any two of the following :
- (a) Define Data Structure. Explain any four operations of Data Structure. 3
 - (b) Write any three distinct differences between Procedure Oriented and Object Oriented Programming. 3
 - (c) Write an algorithm to insert an element into linear array. 3
- (B) Answer any one of the following :
- (a) Define following term of operating system : 4
 - (i) External Priority
 - (ii) Internal Priority
 - (iii) Purchase Priority
 - (iv) Time Slice
 - (b) Write declaration statements in C++ for : 4
 - (i) Pointer to float type
 - (ii) An array of 10 real numbers
 - (iii) An array of 80 characters
 - (iv) An object of class student

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

(a) Explain following tags with example :

3

(i)

(ii) <PRE>

(iii) <U>

(b) What is the function of Information Management ? List any four system call in it.

3

(c) What is Constructor ? Write any four rules for constructor function.

3

(B) Answer any one of the following :

(a) What is Binary Tree ? Draw Binary Tree for following expression :

4

$$Y = (A + B) / (C - D)^2$$

(b) Explain in short, any four ways by which system security can be attacked.

4

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

(a) What is Class ? Explain general form of class declaration.

3

(b) What is Partitioning ? Explain fixed and variable partitioning of short.

3

(c) Write the function of each of the following file stream classes :

3

(i) ifstream

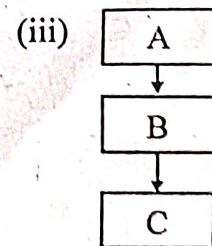
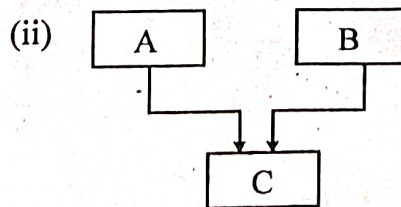
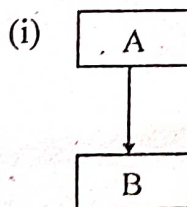
(ii) ofstream

(iii) filebuf

(B) Answer any one of the following :

(a) What is Inheritance ? Identify the types of inheritance of following diagram :

4



(b) What is Virtual Memory ? Explain following terms in virtual memory :

4

(i) page fault

(ii) dirty page

5. Answer any two of the following :

(a) Write a program in C++ to find Greatest Common Divisor (GCD) of two inputted number. 5

(b) Write a program in C++ to accept 10 integers in an array from keyboard and find largest element of array. 5

(c) Write HTML program for following table : 5

IND v/s .ENG

IND 387	Yuvraj 183*
	Dhoni 83
ENG 238	Peterson 58
	Bopara 49
IND WIN by 149 Runs	

OR

5. Answer any two of the following :

(a) Write a program in C++ to create a class test having member functions getmarks () to read marks of two subjects and showsum () to display the total marks. 5

(b) Write a program in C++ to read three integers and find smallest of these numbers. 5

(c) Write HTML code to display following output : 5

LIST tag in HTML

- o Arts
 - 1. Hindi
 - 2. Marathi
- o Commerce
 - Tally
 - Accounts
- o Science
 - A. Physics
 - B. Chemistry