MODEL QUESTION PAPER SET- 1 : 2021 - 22

MM : 50   **COMPUTER SCIENCE Paper – I (THEORY)**   **Time : 3 Hrs**

Entire Syllabus

Q.1. (A) Select the correct alternative and rewrite :   **(4)**

i.   Border attribute is Not used with _____ Tag.   1

(a) BR   (b) TABLE   (c) IMG   (d) TD

ii.   _____ data type takes 8 bytes of memory.   1

(a) int   (b) float   (c) double   (d) char

iii.   _____ is an Operating system.   1

(a) Oracle   (b) Linux   (c) Office   (d) C++

iv.   Context switching is used in _____ .   1

(a) Memory management   (b) Process management

(c) Information Management   (d) Security Management

(B)   Answer any two of the following :   **(6)**

i.   Explain hard disk in terms of Sectors, Tracks and Read write head.   3

ii.   State any six characteristics of Constructor.   3

iii.   Explain : 1) Node 2) Record   3) File   3

Q.2. (A) Answer any two :   **(6)**

i.   Explain Virus detection and prevention.   3

ii.   Explain Runtime and compile time polymorphism   3

iii.   State algorithm for deleting an element in array of length N.   3

(B)   Answer any one.   **(4)**

i.   State any four rules for operator overloading. Also explain operator function.   4

ii.   Explain Scope resolution operator in terms of Local and global variables with example.   4

Q.3. (A) Answer any two: **(6)**

i.   State features of friend functions.   3

ii.   Explain HTML tags : 1) HR   2) MARQUEE   3) PRE   3

iii.   Write features of Windows NT   3

(B)   Answer any one :   **(4)**

i.   Explain opening and closing file in C++ program. Also explain any four file open modes.   4

ii.   Explain working of multiprocessing done by Process management with example.   4

Q.4. (A) Answer any two :   **(6)**

i.   Explain characteristics of static data members.   3

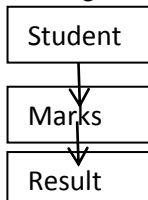ii.   Explain destructor in C++.   3

iii.   Explain Stack with examples of push pop operations.   3

(B)　　**Answer any one:**　　　　　　　　　　　　　　　　　　　　　　**(4)**

i.　　Explain Virtual memory. Also any three terms related with Virtual memory.　　4

ii.　　Explain four different priorities related to Process management.　　4

Q.5.(A) Answer any two :　　　　　　　　　　　　　　　　　　　　　　**(10)**

i.　　Write a c++ program to print 10 Fibonacci series numbers.　　5
　　　(Fibonacci series is :　0 ,　1 ,　1, 2 , 3, 5, 8, 13, 21 …)

ii.　　Write a c++ program to calculate area of Circle using class. Define constructor to input radius &　　5
　　　Member function to calculate and print area and circumference of circle.

iii.　Write HTML code to display following on Web page.　　5

Year	Students		
	Boys	Girls	Total
2019	50	48	98
2020	60	63	123

OR

Q.5.(A) Answer any two :

i.　　Write C++ program to find largest number in any array. Assume length of array is 10.　　5

ii.　　Write C++ Program to Create a class hierarchy as follows.　　5

```
  Student
     |
     v
   Marks
     |
     v
   Result
```

Class student stores Roll number and name of student and member function to input data.

Class Marks stores three subjects marks and member function to input marks.

Class Result with a function to calculate and output result such as student information, marks, total and average marks.

Define main program and work with object of Result class.

iii.　Write HTML code to display following on Web page.　　5

XYZ College	← large size heading
Departments :	← Bold with larger size red font
• Arts • Science • Commerce	
To view College campus <u>Click here</u>	← Link

The words Click here act as hyper link to a file campus.html in Images folder in D: drive

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