

RAMNAD - DT [DR SURESH MATRIC HSS]

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| HALF YEARLY EXAMINATION - 2024 | 11 - STD | |
| COMPUTER SCIENCE | Marks 70 | Time 3.00 Hrs. |

I. Choose the correct answer.

15 x 1 = 15

1. Fourth generation computer used
a) Vacuum tubes b) Transistors c) IC d) Microprocessors
2. $A + A = ?$ a) A b) 0 c) 1 d) A
3. Which is the fastest memory?
a) Hard disk b) main memory c) cache memory d) Blue-Ray disc
4. This can be used as alternate to *endl* command. a) \t b) \b c) \O d) \n
5. The multi way branch statement : a) if b) if else c) switch d) for
6. Which of the following is the scope operator? a) > b) & c) % d) ::
7. `int age [] = { 6, 90, 20, 18, 2 } ;` How many elements are there in this array?
a) 2 b) 5 c) 6 d) 4
8. Which of the following concept encapsulate all the essential properties of the object that are to be created? a) class b) Encapsulation c) Polymorphism d) Abstraction
9. The variables declared inside the class are known as
a) data b) inline c) method d) attributes
10. Which amongst the following is executed in the order of inheritance?
a) Destructor b) member function c) constructor d) object
11. The process of converting cipher text to plain text is called
a) Encryption b) Decryption c) Key d) Proxy server
12. Omitting details inessential to the task and representing only the essential features of the task is known as a) Specification b) abstraction c) Composition d) decomposition
13. 2^{80} referred as a) Kilo b) peta c) zetta d) yotta
14. Operating systems support mobile devices? a) Windows b) Linux c) Boss d) iOS
15. What was the original name given to c++?
a) cpp b) Advanced c c) c with classes d) Class with C

II. Answer any six questions. Q.No. 24 is compulsory.

6 x 2 = 12

16. Distinguish primary and secondary memory.
17. Write the Demorgan's law.
18. What are the security management features available in operating system?
19. Define a loop invariant.
20. What are the importance of void datatype?
21. What is the syntax to declare two-dimensional array.
22. What is a cookie?
23. What is TSCII?
24. Write the output of the following program.

```
#include <iostream>
using namespace std;
int main()
{
    double varf = 178.25255685 ;
    cout<< (float) varf << endl;
    count << (int) var f << endl;
    return o ;
}
```

old :-
~~178.25255685~~
178.2525
178

III. Answer any six questions. Q.No. 33 is compulsory.

6 x 3 = 18

25. Add i) $1101010_2 + 101101_2$ ii) $-22_{10} + 15_{10}$
26. What is Case analysis?
27. What is the different between *isupper()* and *toupper()* functions.
28. What are the rules for function overloading?
29. Differentiate = and ==.
30. What is called anonymous structure. Give an example.
31. What are the functions of windows operating system.
32. Write down the classifications of microprocessors based on instruction set.
33. Write a short program to print following series. 1 4 7 10 40

11001011_2

1101010_2
 101101_2

 1101011_2

1101010_2
 101101_2

 1101011_2

1471013
 16192

$5 \times 5 = 25$

25 22
 37
 37
 37
 40

IV. Answer all the questions.

34. a) Discuss the various generations of Computers. (OR)
 b) Explain the concept of a distributed operating system along with its advantages.
35. a) What are the types of Errors? (OR)
 b) Explain call by value method with suitable example.
36. a) Write the differences between object oriented programming and procedural programming. (OR)
 b) Mention the differences between constructor and destructor.
37. a) Classify the microprocessor based on the size of the data. (OR)
 b) Explain the different types of inheritance.
38. a) What are the various crimes happening using computer? (OR)
 b) Debug the following c++ program.

```

% include (iostream.h)
# include <conio.h>
Class A()
{
    Public :
    int a1, a2, a3 ;
    void getdata [ ]
    {
        a1 = 15; a2 = 13 ;
    }
class B : : public A()
{
    PUBLIC
    void fun()
    {
        int b1 : b2 : b3 ;
        b1 = a1 ;
        b2 = a2 ;
        count << b1 << b2 ; }
    }
void main ()
{
    B der ;
    der1 func();
}
    
```

110101

1101010

101101

1010111