

RAJA RAVI VARMA GIRLS HSS KILIMANOOR

FIRST YEAR HIGHER SECONDARY PREMODEL EXAMINATION -2023

COMPUTER SCIENCE

Time : 2 hour

Maximum Scores : 60

Cool off Time : 15 mts

Answer any 5 questions from to Each 1 to 6.Each correct answer Carries 1 score (5*1=5)

1. Greek number system is known as _____
2. Which gates are called universal gates
3. Label in c++ is a _____
4. The _____ operator gives the remainder value during arithmetic division in C++.
5. Printing all the elements of an array is an example for operation
6. I am a piece of software. With the help of me a user can search information from the internet and navigate through the web pages. Who am I?

Answer any 9 questions from 7 to 18.Each correct answer Carries 2 score (9*2=18)

7. Compare Roman Number system and Mayan's Number system
8. Fill in the Blanks
 - 1) (_____, 14)₈ =(111101,____)₂
 - 2) 1's Complement of (1110111010)₂ is _____
9. What is De Morgan's Law
10. Difference between RAM and ROM
11. what are the different types of documentation?
12. Draw any two flowchart symbols and write their purpose.
13. Difference between Entry controlled loop and Exit Controlled loop.
14. What is the difference between **char** and **"char"** in C++?
15. Write down the rules governing Identifier
16. Write the structure of a C++ Program.
17. Difference between call by value and call by reference.
18. Write the built in functions for the following :
 - a) To find the square root of 64
 - b) To convert the character 'p' to 'P'

Answer any 9 questions from 19 to 29.Each correct answer Carries 3 score (9*3=27)

19. Draw the circuit diagram
 $A'B + (AB)' + ABC'$
20. Find the 1's Compliment, 2's Complement and Sign and magnitude form of -97
21. Explain about any three input devices.
22. Explain cascading of input and output operators Give one example each .
23. a) Difference between $a=b$ and $a==b$
b) Explain Variable Declaration, Variable initialization
24. Rewrite the following code using switch statement
If (day==1)
cout<<"Sunday";
else if (day==2)
cout <<"Monday";
else
cout<<"invalid number";
25. With the help of an example write the 4 components of looping statement.

26. Given int A []={10,15, 20, 25,30}; Give the output for

1. cout<<A[0];
2. cout<<A[0]+A[2]
3. cout<<A[1]+3

27. a) Write the declaration statement for a variable 'Text' in C++ to store a string of maximum length 25.

b) Differentiate between the statements cin>>Text; and gets(Text) for reading data to the variable 'Text'

28 a) What is data communication ?

b) Name any two guided media

29. Explain any two network typologies

Answer any 2 questions from 30 to 32. Each correct answer Carries 5 score (2*5=10)

30. a) What is e-waste? What are the different type of e-waste disposal methods.? Explain any two
b) What is cache memory?

31. Correct the errors in the following C ++ program .

```
1) # include <iostream>;                                     (3)
   using name space std;
   int main ()
   {
   int a;b,sum ;
   cout <<"Enter Two Numbers";
   cin<<a,b;
   Sum=a+b;
   cout<<"sum="<<"sum";
   }
```

2) Difference between variable initialization and dynamic initialization. (2)

32. In order to form a network of 5 computers in the School Office

a. Name and draw the topology that uses switch to connect all the nodes . (1.5)

b. Name and draw the topology that ensures direct connection between every node . (1.5)

c. Which would be your choice between the two? Why ? (2)

Prepared By: **Vishnu Kalpadakkal, HSST Jr Computer Science, RRVGHSS Kilimanoor**