



Reg. No. :

130

Name :

**FIRST YEAR HIGHER SECONDARY MODEL
EXAMINATION, FEBRUARY 2024**

**Part – III
COMPUTER SCIENCE
Maximum : 60 Scores**

Time : 2 Hours
Cool-off Time : 15 Minutes

General Instructions to Candidates :

- There is a 'Cool off time' of 15 minutes in addition to the writing time.
- Use of 'cool off time' to get familiar with questions and to plan your answers.
- Read questions carefully before answering.
- Read the instructions carefully.
- Calculations, figures and graphs should be shown in the answer sheet itself.
- Malayalam version of the questions is also provided.
- Give equations wherever necessary.
- Electronic devices except non programmable calculators are not allowed in the Examination Hall.

വിദ്യാർത്ഥികൾക്കുള്ള പൊതുനിർദ്ദേശങ്ങൾ :

- നിർദ്ദിഷ്ട സമയത്തിന് പുറമെ 15 മിനിറ്റ് 'കൂൾ ഓഫ് ടൈം' ഉണ്ടായിരിക്കും.
- 'കൂൾ ഓഫ് ടൈം' ചോദ്യങ്ങൾ പരിചയപ്പെടാനും ഉത്തരങ്ങൾ ആസൂത്രണം ചെയ്യാനും ഉപയോഗിക്കുക.
- ഉത്തരങ്ങൾ എഴുതുന്നതിന് മുമ്പ് ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- നിർദ്ദേശങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കണം.
- കണക്ക് കൂട്ടലുകൾ, ചിത്രങ്ങൾ, ഗ്രാഫുകൾ, എന്നിവ ഉത്തരപേപ്പറിൽ തന്നെ ഉണ്ടായിരിക്കണം.
- ചോദ്യങ്ങൾ മലയാളത്തിലും നൽകിയിട്ടുണ്ട്.
- ആവശ്യമുള്ള സ്ഥലത്ത് സമവാക്യങ്ങൾ കൊടുക്കണം.
- പ്രോഗ്രാമുകൾ ചെയ്യാനാകാത്ത കാൽക്കുലേറ്ററുകൾ ഒഴികെയുള്ള ഒരു ഇലക്ട്രോണിക് ഉപകരണവും പരീക്ഷാഹാളിൽ ഉപയോഗിക്കുവാൻ പാടില്ല.



Score

Answer any 5 questions from 1 to 6. Each carries 1 Score.

(5×1=5)

1. Who is known as the father of Modern Computer Science ?
2. Each digit of a binary number is called _____
3. Name the process of converting source code into object code.
4. Name the keyword that indicates the empty set of data.
5. Find the value of mark[4] based on the following declaration statement.
`int mark[5] = { 89, 78, 96, 97, 58 }`
6. Any device which is directly connected to a computer network is known as _____

Answer any 9 questions from 7 to 18. Each carries 2 Scores.

(9×2=18)

7. State the two De Morgan's theorems.
8. List any two Input and Output devices.
9. Write any 2 advantages of flow chart.



10. Write an algorithm to find the sum of 3 numbers.

11. Write output of the following C++ program.

```
#include <iostream>
using namespace std;
int main()
{
int a=1, b=2, c=3;
cout<<a+b+c/3;
cout<<'\n';
cout<<(a+b)%c
}
```

12. Match the following :

A	B
1. Relational Operator	a. ?:
2. Logical Operator	b. =
3. Conditional Operator	c. ==
4. Assignment Operator	d.



13. Write the 4 different statements in C++, used to add value '1' to the variable 'a' and store the new value in 'a' itself.
14. Distinguish between Linear search method and Binary search method.
15. Compare Call by Value and Call by Reference methods.
16. What is a Recursive function ?
17. Name any 4 types of wireless communication technologies.
18. Write any 4 advantages of Social Media.

Answer any 9 questions from 19 to 29. Each carries 3 Scores.

(9×3=27)

19. Explain John Von Neumann's computer architecture with the help of a block diagram.
20. Represent -38 in 2's Complement form.
21. Expand the following terms :
- a) ASCII
 - b) EBCDIC
 - c) ISCI



22. Compare RAM and ROM.
23. Define the different types of errors that are encountered during the compilation and running of a program.
24. Explain any three types of tokens used in C++.
25. Write any 3 differences between 'break' and 'continue' statements in C++.
26. Write an algorithm for selection sort in an Array.
27. List and explain any 3 stream functions for I/O operations.
28. Explain any 3 string functions in C++.
29. Explain the following terms :
- a) Hacking (1)
 - b) Phishing (1)
 - c) DoS. (1)



Score

Answer any 2 questions from 30 to 32. Each carries 5 Scores.

(2×5=10)

30. 1) What is e-waste ? (1)
- 2) List and explain any 4 e-waste disposal methods. (4)
31. 1) What are the four elements of a loop in C++ ? (2)
- 2) Write a C++ program to find the sum of even numbers between 1 and 20. (3)
32. 1) What do you mean by Network Topology ? (1)
- 2) Explain the different types of Topologies. (4)
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