

HTJ

HALF YEARLY EXAMINATION- 2022

COMPUTER SCIENCE



CLASS : 11

MARKS : 70

TIME : 3.00 Hrs

Instructions: 1. Check the Question paper for fairness of printing. If there is any lack of fairness, inform the Hall Supervisor immediately. 2. Use Blue or Black ink to write and underline and pencil to draw diagrams.

PART-I

15 X 1 = 15

Choose the best answer.

1. Which generation of computer used IC's?
a) First b) Second c) Third d) Fourth
2. NOR is a combination of?
a) NOT(OR) b) NOT(AND) c) NOT(NOT) d) NOT(NOR)
3. Which is the fastest memory?
a) Hard disk b) Main memory c) Cache memory d) Blue-Ray disc
4. The File management system used by Linux is
a) ext2 b) NTFS c) FAT d) NFTS
5. The shortcut key used to rename a file in windows
a) F2 b) F4 c) FS d) F6
6. How many times the loop is iterated?
i := 0
while i # 5
i := i + 1
a) 4 b) 5 c) 6 d) 0
7. Which of the following operator is extraction operator in C++?
a) >> b) << c) d)
8. Which of the following is the exit control loop?
a) for b) while c) do...while d) if...else
9. Which operator is used to access reference of a variable?
a) S b) # c) & d)!
10. Which of the following is the scope operator?
a) > b) & c) % d) ::
11. int age[]=(6,90,20,18,2); How many elements are there in this array?
a) 2 b) 5 c) 6 d) 4
12. Which of the following is a user defined data type?
a) class b) float c) int d) object
13. The member function defined within the class behave like..... functions.
a) Inline b) Non inline c) Outline d) Data
14. Which of the following is not a malicious program on computer systems?
a) worms b) Trojans c) spyware d) cookies
15. Expand ISCII
a) Indian Software Code for Information Interchange
b) Indian Script Code for Information interchang
c) Infonet Software Code for internet information
d) Indian Software Code for information Information

PART - II

II Answer any 6 questions. (Q.No.19 compulsory)

6 X 2 = 12

16. What are the components of a CPU?
17. What is HDMI?
18. Differentiate Save and save As option.?
19. Why is function an abstraction?
20. Write a short note on const keyword with an example?

21. What are importance of void data type.
22. Differentiate classes and objects.
23. List the operators that cannot be overloaded.
24. List the search engines supported by Tamil language.

PART-III**III Answer any 6 question. (Q.No. 30 Compulsory).****6 x 3 = 18**

25. Write the truth table of fundamental gates?
26. List out the key features of Operating system?
27. What is the difference between assignment operator and equality operator?
28. What is recursive problem solving?
29. Define an Array? What are the types?
30. What are advantages of declaring constructors and destructor under public accessibility?
31. What is difference between the members present in the private visibility mode and the members present in public visibility mode?
32. Write about encryption and decryption?
33. Write the syntax and purpose of switch statement?

PART - IV**IV Answer the following questions.****5 x 5 = 25**

34. Discuss the various generations of computers.(OR)
 - a) Add $1101011_2 + 1011001_2$.
 - b) Subtract $1101001_2 - 111011_2$
35. Explain the characteristics of a microprocessor? (OR)
Write the procedure to create shortcut in Windows OS?
36. Explain the different types of inheritance. (OR) What is an entry control loop? Explain any one of the entry controlled loop with suitable example.
37. Explain scope of variable with example. (OR)

Write the output of the following c++ program.

```
#include<iostream>
#include<stdio>
#include <string>
#include<conio>
using namespace std;
struct books {
char name[20], author[20];
} a[50];
int main()
cout<< "Details of Book No " << 1 << "\n";
cout<< " ..... \n",
cout<< "Book Name : "<<strcpy(a[0].name, "Programming) "<<endl;
cout<< "Book Author:"<<strcpy(a[0].author, "Dromy")<<endl;
cout<< "\nDetails of Book No " << 2 << "\n";
cout<< "Book Name : "<<strcpy(a[1].name, "C++programming")<<endl;
cout<< "Book Author : "<<strcpy(a[1].author, "BjarneStroustrup "<<endl;
cout<< "\n\n";
cout<< " ..... \n"
cout<< "S.No\t Book Name\t|author\n";
cout<< " ..... \n"
for (int i=0; i<2; i++) {
cout<< "\n" << i+1 << "\t" << a[i].name << "\t" << a[i].author;
}
cout<< "\n- ..... ";
return 0;
}
```

38. What are the rules for operator overloading?(OR)
Mention the differences between constructor and destructor