Reg No:……..

Name:…….

FY-M4

FIRST YEAR HIGHER SECONDARY MODEL EXAMINATION, AUGUST 2021

Part III

COMPUTER SCIENCE

Maximum: 60 Scores

Time: 2 Hours

Cool off time: 20 Minutes

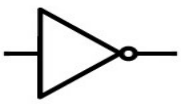
General Instructions to Candidates

- There is a cool-off time of 20 minutes.
- Use cool-off time to familiarize questions and to plan your answers.
- Read Questions carefully before answering.
- Read the instructions carefully.
- Calculations and figures should be shown in the answer sheet itself.
- Give equations wherever necessary.
- Electronic devices except non-programmable calculators are not allowed in the examination hall

Part A

Answer any 5 questions from 1 to 7. Each carries 1 score. **(5 x 1 = 5)**

1. ASCII stands for …….
2. The following figure is a …….. gate.



3. Windows 10 and Ubuntu are example for ……
4. A …… character is inserted automatically at the end of a string.
5. The function which is used to find the length of a string is ……..
6. The hardware interface between a computer and a network is ……
7. …….. is a software used to access the web pages in the World Wide Web

Part B

Answer any 10 questions from 8 to 27. Each carries 2 scores. **(10 x 2 = 20)**

8. What are the features of an analytical engine?
9. Explain hacking.
10. Write some advantages of e-mail.
11. Explain IP address.

12. Write the difference between hub and switch.
13. Match the following

    pow( ) – iostream

    strcpy( ) - cmath

    toupper( ) – cstring

    get( ) – cctype
14. Write the difference between formal and actual argumets.
15. What do you mean by function prototype?
16. How many bytes of memory is necessary to store the string 'Covid' in an array?
17. What do you mean by array traversal?
18. Write differences between break and continue.
19. What are the keywords used for a switch statement in C++?
20. What do you mean by an input statement? Write an example for input statement.
21. What is type promotion?
22. What do you mean by a string in C++? Write an example for a string.
23. What is a keyword in C++? Write an example for a keyword.
24. What are the advantages of a flowchart?
25. Write the difference between interpreter and compiler.
26. Draw the truth table for AND operation.
27. Convert the decimal number 40 to binary.

Part C

Answer any 10 questions from 28 to 48. Each carries 3 scores. **(10 x 3 = 30)**

28. Write the differences in technology in different generations of computers.
29. Find the 2's complement of -55 using 8 bits.
30. 10110110101_2 = …… $_{10}$
31. Explain any three ports in a computer.
32. Explain different E-waste disposal methods.
33. What are the phases in programming?
34. Explain three errors in programming.
35. Name the five tokens in C++.
36. Name the fundamental data types? How many bytes of memory are allocated for each of the data type?
37. Consider the following code

    int num = 1500 ;

    Write the variable, content and operator in the above code.
38. What do you mean by a conditional operator? Write an example.

39. Convert the following *for* loop statement to *while* loop.

```
for( int i =1; i <  100 ; i+=2)
{
        cout << i << "\t" ;
}
```

40. Write array declarations

    a) to store 100 numbers b) to store a name of 20 characters c) to store 10 large numbers

41. Explain any two stream functions. Write example for each.

42. Explain any three character functions.

43. What are the advantages of modular programming?

44. Explain any three network topologies.

45. What are the advantages of a network?

46. Explain different classification of social media.

47. What are the functions of an operating system?

48. Explain the following terms

    a) Virus b) Worm c) Trojan horse

Part D

Answer any 1 questions from 49 to 50. Carries 5 scores. **(1 x 5 = 5)**

49. Match the following

A	B
iostream	Punctuator
void	Operator
main ( )	String
if	Character literal
while	Keyword
<<	Loop
"Hello"	Identifier
'\n'	Data type
#	Header file
sum	Function

50. Explain the following terms

    a) Router b) Repeater c) Bridge d) Spams e) Phishing