

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – December 2022
Programme Name: B Tech (ME)
Semester: I
Subject Code: UG11T4103
Subject Name: COMPUTERS

Date: 27.12.2022

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Options, if any, are specified in respective section.

Section A-(Compulsory)

Q.1 Answer the following

(10x1=10 Marks)

1. Printer is
 - a. Input Device
 - b. Output device
 - c. Both input and output device
 - d. None of the above

2. Maximum number of bits required to represent any Hexadecimal digit is
 - a. One
 - b. Two
 - c. Three
 - d. Four

3. CPU is
 - a. Control processing utility
 - b. Control Processing unit
 - c. Central processing utility
 - d. Central processing unit

4. What is the answer to $1001 + 0101$?
 - a. 1011
 - b. 1101
 - c. 1110
 - d. 0111

5. The octal equivalent of 1010101.011010 is _____
- a. 135.23
 - b. 125.32
 - c. 135.32
 - d. 125.23
6. Computer networks can share _____
- a. Data
 - b. Resources
 - c. Both
 - d. None
7. Convert the hexadecimal number $(1B2)_{16}$ to decimal.
- a. 424
 - b. 464
 - c. 434
 - d. 484
8. Antivirus is type of software?
- a. Application Software
 - b. Firmware
 - c. Device Driver
 - d. Utility Software
9. 2's complement of 10011011 is _____
- a. 01010111
 - b. 01100101
 - c. 11010100
 - d. 11100010
10. Which of the following is not a binary number?
- a. 11E
 - b. 1111
 - c. 101
 - d. 00

Section B-(Compulsory)
(5 x 2= 10 marks)

Q.2 Answer the following

11. Distinguish between volatile and non-volatile memory.
12. Enlist any four output devices.
13. Distinguish between structure and union.
14. Define compiler and interpreter.
15. Enlist any four applications of internet.

Section C- Answer any 5 out of 7 Questions
(05 X 10 Marks)

16. What do you mean by computer memory? Explain in details different types of computer memory. 10 marks
17.
 - a. Explain in details Bus and Star topology. 5 marks
 - b. Explain in detail AND gate and OR gate. 5 marks
18. What is string? Explain in details any four string library functions along with the syntax. 10 marks
19.
 - a. What do you mean by De-multiplexer? Explain applications of De-multiplexer. 5 marks
 - b. Write a C program to calculate roots of the quadratic equations. 5 marks
20.
 - a. Write a program to check whether the entered number is Armstrong number or not? 5 marks
 - b. Write a program to perform addition of two symmetrical matrices of same order. 5 marks
21. What do you mean by loop? Explain in detail while loop and do while loop along with the syntax and suitable example. 10 marks
22. What do you mean by software? Explain in detail system software and application software with its subtypes. 10 marks

