

Indian Maritime University
(A Central University, Govt of India)

September/October 2024 – Supplementary Examinations

Programme Name: B Tech (ME)

Semester: I

Subject Code: UG11T4103

Subject Name: COMPUTERS

Date: 04.09.2024

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

Answer all the question multiple choice (MCQs)/Fill in the Blanks 10x1=Marks

1. One (GB) Gigabyte is equal to --?

- a) 1024 KB
- b) 1024 MB
- c) 1,024 TB
- d) 1024 bytes

2. --- perform special functions such as managing system resources and improving efficiency

- a) compiler
- b) application software
- c) loader
- d) Utility program

3. – refers to those application that use/combine text, graphics, images, sound/audio, animation and/or video

- a) Hypertext
- b) multimedia
- c) both a and b
- d) None of the above

4. Which of the following statements about ROM is true?

- a) It is volatile memory
- b) It is used for temporary data storage
- c) It retains data even when the power is turned off
- d) It can be written to and erased multiple times.

5. A device that allows users to feed data into a computer for analysis and storage and to give commands to the computer is called

- a) Output device
- b) Input device
- c) Memory
- d) storage device

6. Which logic gate has a single input and produces the opposite output?
- AND gate
 - OR gate
 - NOT gate
 - XOR gate
7. Which topology uses a single cable which connects all the nodes?
- bus
 - star
 - ring
 - none of the above
8. What is the result of the expression $10 / 4.0$ in C language?
- 2
 - 2.5
 - 2.0
 - none of the above
9. --- statement is used to exit (to transfer the program control out of) a loop or switch statement (Fill in the blank)
10. In C a pointer variable to a char can be declared as
- char p*;
 - char *p;
 - char +p;
 - char \$p;

Section B

Answer all the Five Questions

5X2=10Marks

- Explain two differences between magnetic hard disk drives (HDDs) and magnetic tapes
- List any four advantages of Multimedia
- Explain any two input devices and their functions
- What is the use of network Routers?
- Define constant in C language. Give an example

Section C

Answer Seven Questions of 10 Marks each of which any 05 questions to be answered.

- Convert the decimal number 273.5 to its equivalent hexadecimal (5 marks)
 - Convert the binary number 10111011.101 to its equivalent decimal (5 marks)
- What is backup? What are the advantages of backup? (5 marks)
 - Explain the types of backup (5 marks)
- What is RAM (random access memory)? Explain the types of RAM (10 marks)
- Explain any 2 logic gates with diagram and truth table (5 marks)
 - Explain analogue to digital converter (5 marks)

20. a) Explain in details Bus and Star topology. (5 marks)
b) Write a C program that checks if a given number is even or odd and prints an appropriate message (5 marks)
21. Explain the primary datatype of C programming language (10 marks)
22. a) Write a C Program to find the largest element in an Array using for loop (5 marks)
b) Describe function declaration and definition with suitable example (5 marks)

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