

INDIAN MARITIME UNIVERSITY
(A Central University, Government of India)
End Semester Examination Dec 2019/Jan 2020
B.Tech (Marine Engineering)
Semester -II
UG11T3205 - COMPUTER SCIENCE

Date: 10.01.2020
Time: 3 Hours

Max Marks: 70
Pass Marks: 35

Part – A (compulsory)

Answer the following (10x2=20 Marks)

- 1 Write a short note on Computer Memory. [2]
- 2 Write the different tasks performed by CPU [2]
- 3 Convert hexadecimal number (F4C)₁₆ into decimal [2]
- 4 Write an algorithm to find Simple Interest. [2]
- 5 Difference between formal argument and actual argument in C Functions? [2]
- 6 What are C identifiers?□ [2]
- 7 Are the expressions *ptr++ and ++*ptr same? [2]
- 8 What will be the output of the following program. Justify your answer. [2]

```
int main()
{
    int color=2;
    switch(color)
    {
        case 0: printf("Black");
        case 1: printf("Blue");
        case 2: printf("Green");
        case 3: printf("Aqua");
        default: printf("Other");
    }
    return 0;
}
```
- 9 Explain the concept of HTTP [2]
- 10 What is loop? What are the three kinds of loops in C? [2]

Part – B

Answer any 5 out of 7 questions (5 x 10= 50 marks)

- 11 (a) Describe the main functions of the following components of a computer: [6]
1) ALU
2) BUS
3) BIOS
- (b) What are the possible threats to a computer system and how to provide security? [2]
- (c) Convert binary number 0110 011.1011 into octal number. [2]
- 12 (a) Explain the principles which play a major role in development of software. [5]
- (b) What is Internet ? Explain Tree Topology. [5]
- 13 Write an Algorithm and draw a Flowchart to find Odd numbers between 1 to n where n is a positive Integer. [10]
- 14 (a) Write a C program to check whether a character is an alphabet, digit or special character. [5]
- (b) The program takes an integer input from the user and generates the multiplication table up to 10. [5]
- 15 Explain the Types of Operators in C [10]
- 16 (a) Write C Program to Find Largest Element in an Array [5]
- (b) write a short note on Pointers in C. [5]
- 17 (a) Explain the significance of the break statement in the switch case construct. What would be the result in its absence? Give the syntax of switch case. [5]
- (b) What is the use of Functions in C programming [5]

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