

INDIAN MARITIME UNIVERSITY
(A Central University Government of India)
END SEMESTER EXAMINATIONS-June/July 2019
B.Tech(Marine Engineering)
Semester-II
COMPUTER SCIENCE (UG11T2205)

Date: 04-07-2019

Maximum Marks: 100

Duration: 3 hrs

Pass Marks: 50

Section – A (10x3 = 30 marks)
(All questions are compulsory)

1. a) Explain analog, digital & hybrid computer.
- b) Differentiate between data & information.
- c) What is volatile memory & non volatile memory?
- d) List the symbols used for flowchart.
- e) Convert binary number $(1010100)_2$ into decimal number.
- f) Why compiler & interpreter used? Is there any difference between compiler & interpreter? explain.
- g) Why do we include `<stdio.h>` in c programs?
- h) How one dimensional array is initialized?
- i) What are formal parameter & actual parameter in functions?
- j) What is pointer? How is pointer declared in c programs?

Section – B (5x14 = 70 marks)
(Answer any Five of the following)

2. a) Convert following numbers :
 - (i) Hexadecimal $(1E2)_H$ into decimal equivalent. (3)
 - (ii) decimal number 54.6875 into binary equivalent. (4)
- b) Briefly explain software development steps. (7)
3. a) Explain briefly " The development of electronic computers divided into five generations depending upon the technologies used." (7)

- b) What is programming language? Write a short note on machine language & assembly language. (7)
4. a) Explain major types of computer networks based on size. (7)
b) Design an algorithm & flowchart to input fifty numbers & calculate their sum. (7)
5. a) Write C program to print fibbinacci series in given range. (7)
b) Write a short note on operators available in C language. (7)
6. a) Explain different loops available in c language with example. (7)
b) Write a C program to print the following pattern using for loop. (7)
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7. a) Write a C program to calculate sum of array elements. (7)
b) Explain various string operation with examples. (7)
8. a) Mention different types of functions (based on input & return value). Explain recursive function with an example. (7)
b) Write a C program using pointer to print a character. Also print its ASCII value & rewrite the character in upper case. (7)
