

Indian Maritime University

(A Central University, Govt of India)

May-June 2018 End Semester Examinations

B. Tech (Marine Engineering)

Semester-II

COMPUTER SCIENCE (UG11T3205)

Date: 19.06.2018

Max Marks:100 Marks

Time: 3 Hrs

Pass Marks: 50 Marks

Part –A

(10 x 3 = 30)

(All questions are Compulsory)

1)

- a) Discuss the characteristics of computer
- b) Covert the $(516)_8$ and $(9A5)_{16}$ to binary form
- c) Explain the process of booting
- d) Define Phishing, URL
- e) Write a Pseudocode to find Area of Circle (πr^2)
- f) Write a program to find the total amount when there are 5 notes of Rs.100, 3 notes of Rs.50 and 20 notes of Rs.20
- g) What is loop? Why it is necessary in the program?
- h) List any three library function and illustrate them with example
- i) What is a union in C? How data is stored using union?
- j) What is TCP/IP? Explain

Part – B

(5 x 14 = 70)

(Answer any 5 of the following 7 Questions)

2)

- a) Explain the basic computer organization with neat diagram (7)
- b) What is a software? Discuss the types of it (7)

3)

- a) Convert the following to its decimal equivalent (7)
 - i) $(2E5)_{16}$
 - ii) $(531)_8$
 - iii) $(1101010)_2$

- b) Write short notes on Internet Security (7)

4)

- a) Explain the difference between router, switch and gateway (7)

b) Define a flowchart. Draw a flowchart to log in to your email account (7)

5)

a) What is Computer Network? Explain the various types of computer network. (7)

b) State the order of evaluation of the operations in each of the following C statements and implement them to show the value of x after each statement. (7)

i) $x = 7 + 3 * 6 / 2 - 1;$

ii) $x = 2 \% 2 + 2 * 2 - 2 / 2;$

iii) $x = (3 * 9 * (3 + (9 * 3 / (3))));$

6)

a) Write a program to check whether a character is vowel or not using switch case (7)

b) Explain the while loop with an example (7)

7)

a) Write a program in C to read n number of values in an array and display it in reverse order (7)

b) Explain with example different ways of reading string from terminal. (7)

8)

a) Write a program in C to find the square of any number using the function. (7)

b) Define pointer Discuss on pointer arithmetic? (7)