

INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

May/June 2018-End Semester Examination

B.Tech(Marine Engineering)

Semester II

COMPUTER SCIENCE (UG11T2205/1205)

Date: 19-06-2018

Maximum Marks:100

Time: 3 Hrs

Pass Mark : 50

Part –A

(All questions are Compulsory)

10 x 3 = 30

1)

- a) Discuss the characteristics of computer
- b) Convert the $(653)_8$ and $(9E5)_{16}$ to binary form
- c) What does an operating system do for hardware and user?
- d) Write short notes URL, TCP/IP
- e) Write a Pseudocode to find Area of Circle (πr^2)
- f) What is MsExcel? What are its applications?
- g) Write a C++ program to find the area and volume of sphere. Formulas are:
Area = $4 * \text{PI} * R * R$ Volume = $4/3 * \text{PI} * R * R * R$.
- h) What is loop? Why it is necessary in the program?
- i) List any three library function and illustrate them with example
- j) What is a union in C? How data is stored using union?

Part – B

(Answer any 5 of the following 7 Questions)

5x14=70

2)

- a) Explain the basic computer organization with neat diagram (7)
- b) How are computers classified? Explain briefly (7)

3)

- a) Define software. Discuss various types of software (7)
- b) Write short notes on Firewall and router (7)

4)

- a) What is an algorithm? Discuss its uses (7)
- b) Define a flowchart. Draw a flowchart to log in to your email account (7)

5)

- a) What is preincrement and post increment operator? Explain with example(7)
- b) Explain if statement with example (7)

- 6)
- a) Explain the use of 2D array with example (7)
 - b) Write a C++ program to find the sum of first 100 natural nos. (7)
- 7)
- a) Write a program in C to find the square of any number using the function.(7)
 - b) Write short notes on pointers, structures (7)
- 8)
- a) List the different input devices and explain any three of them (7)
 - b) What is Computer Memory? Explain various types of it (7)
