B.Tech. Degree I & II Semester Examination in Marine Engineering May 2019

MRE 1109 COMPUTER FUNDAMENTALS
(2013 Scheme)

Time: 3 Hours   Maximum Marks: 100

$(5 \times 20 = 100)$

I. (a) Draw the block diagram of a digital computer system and explain in detail.   (12)

   (b) Write a short note on system software and operating systems.   (8)

OR

II. (a) Explain various types of languages using in Computer systems.   (12)

   (b) Write a short note on LAN and WAN.   (8)

III. (a) Explain basic data types available in C language.   (12)

   (b) Write a program in C language to find the factorial of a given number.   (8)

OR

IV. (a) Explain multiple branching statements available in C language.   (12)

   (b) Differentiate between break and continue statements.   (8)

V. (a) Explain various storage classes available in C language.   (12)

   (b) Write a short note on usage of Command line arguments.   (8)

OR

VI. (a) Write a program in C language to sort a set of numbers in descending order using selection sorting technique.   (12)

   (b) Write a program in C language to print the Fibonacci series of n terms using recursion.   (8)

VII. (a) Explain the characteristics of various DBMS models.   (12)

   (b) Write a note on Virtual functions.   (8)

OR

VIII. (a) Explain the characteristics of Object Oriented Programming.   (12)

   (b) Write the difference between Selection and Projection in relational algebra.   (8)

IX. (a) Explain the usage of Union and Structures in C language with sample program.   (12)

   (b) Write the usage of fgetc(), fgets(), and fseek() in C language.   (8)

OR

X. (a) Write a program in C language to create a file to store the mark details of a set of students.   (12)

   (b) What is meant by enumerated data types in C language?   (8)

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