B.Tech. 1st Semester Examination
Introduction to Computer Programming
Subject Code: CSL-101

Time Allowed: 03 hours. Maximum Marks: 100

Before answering the question paper the candidate should ensure that they have been supplied the correct question paper. Complaints in this regard, if any, shall not be entertained after the examination.

Note: Attempt any five questions and all questions carry equal marks.

Section – A

1(a) What do you mean by a system? Explain Computer system with its various applications and define its Characteristics. 12

(b) Define various data measuring units of computer system with number of bits in each unit. 8

2(a) Convert the following numbers into their equivalent numbers. 10

(i) \((105)_{10} = (?)_{2}\)
(ii) \((66.5)_{10} = (?)_{8}\)
(iii) \((101010)_{2} = (?)_{10}\)
(iv) \((10101010101)_{2} = (?)_{16}\)

(b) Define Operating System, Explain various functions performed by computer Operating system. 10

3(a) Name the various computer system Languages and differentiate between high level and assembly level language. 6

(b) Define computer network and explain various network topologies in detail with suitable diagram. 14

Section – B

4(a) Explain various data types of C language also differentiate variable and constant. 10

(b) Write a program in C to print the Fibonacci series. 10

5(a) Write a program in C to print the following pattern. 10

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*           *         *         *
*         *       *         *
*     *   *     *   *
*   * *   * * * *
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(b) Explain the difference between structure and Union with suitable example. 10

6(a) Explain the methods by which values of a structure can perform one function to another. 10

(b) WAP in C that maintains the marks of 12 students with minimum six subject by using Union. 10