## Assignment:I

**Course:** B.Tech (CSE) **Year/Semester:** I/I **Session:** 2017-2018

**Subject Name & Code:** Fundamentals of Computer & Programming (CSE 1101)

**Submission Date:**

**Q1.** Write an algorithm for calculating the price of a product after adding the sales tax to its original price.

**Q2.** Draw a flowchart to calculate the weekly wages of an employee. The pay depends on wages per hour and number of hours worked. Moreover, if the employee has worked for than 30 hours, then he or she gets twice the wages per hour, for every extra hour that he or she has worked.

**Q3.** Write an algorithm and draw a flow chart to find age of any student of your section where date, month, year of birthday are entered by the user.

**Q4.** Write an algorithm and draw the flow chart for determining the sum of the series 2+4+6+8+10+………………upto n.

**Q5.** Write an algorithm to check whether the given number is prime or not. Also draw the flow chart for the same.

**Q6.** Write an algorithm for the following series: 1+ ½! +1/3! + ¼! + ……upto n terms. Also draw the flow chart.

**Q7.** Write an algorithm to calculate the percentage and print the grade obtained by a student of class 12th using the following rules: A+ 90-100, A 70-89, B 50-69, F 0-49

**Q8.** Perform the following conversion:

(a) (754.812)10 = (?)2

(b) (725.475)10 = (?)8

(c) (979.74)10 = (?)16

**Q9.** Perform the following conversion:

(a) (1101010.001)2 = (?)10

(b) (775.125)8 = (?)10

(c) (ABC9.CD5)16 = (?)10

**Q10.** Perform the following conversion:

(a) (10101011.1101011)2 = (?)8

(b) (111100011100.1101010)2 = (?)16

**Q11.** Perform the following conversion:

(a) (7512.257)8 = (?)2

(b) (921DA.CFA)16 = (?)2

(c) (11101010.111)2 = (?)4

**Q12.** Perform the following conversion:

(a) (257.725)8 = (?)16

(b) (98BE.AD75)16 = (?)8 = (?)4

(c) Find the value of A? (1527)8 = (357)A