

Smt. Indira Gandhi College of Engg.

FE Department

Unit Test 1

Class: FE Sem: II Subject: SPA A.Y.: 2016-17

(1hour)

Instructions: - All Questions are Mandatory.

[Total Marks 20]

Q.1 Solve any 5 questions. Each question carries 2 Marks

[10 Marks]

- a) What is OS? List out its components. [CO1]
- b) What is an identifier? What are the rules applicable to make an identifier? [CO2]
- c) Explain the getchar() function & gets() function [CO2]
- d) Explain difference between while loop and do-while loop. [CO3]
- e) Define an algorithm. Which points you should consider while developing the algorithm? [CO1]
- f) Write a program to check whether the entered number is even or odd. [CO3]

Q.2 Solve any one

[5 Marks]

- a) Write a program to display the following pattern

[CO3]

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*
*  *
*  *  *
*  *  *  *
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- b) Write a program to accept three numbers from user and display the greatest of three using the conditional operator. [CO2]

Q.3 Solve any one

[5 Marks]

- a) Write a program to calculate energy bill. Read the starting and ending meter reading. Charges are as follows: [CO3]

No. of units consume	Rate in Rs.
200-500	3.50
100-200	2.50
<100	1.50

bill

- b) Design and develop an algorithm and flowchart for displaying the first 'n' natural numbers, where value of 'n' is taken from user. [CO1]