

Arab Academy for Science, Technology and
Maritime Transport-College of Computing &
Information Technology—Sheraton branch
Course : Problem Solving and
Programming
Examiner : Dr. Shereen A. Hussein



Academic Year : 2023/2024
Semester : Spring
Department : Computer Science
Time Allowed : 90 Minutes

Tuesday-4

Model (A)

15

Write a C program for each of the following problems:

For building electricity bill calculation. Using parallel arrays, read a series of 5 records in pairs (9 points)
which are

1. consumption unit (out of 1000)
2. consumption type ('r' will stand for "residential", 'c' will stand for "commercial").

Use the following Table:

Units	Residential	Commercial
0<units<=200	0.8	0.6
above 200	0.7	0.3

- a. double Calc_Cost(double unit, char type);
(this function is used to calculate the cost according the consumption type)
- b. void Display_Bill(double x[], int n);
(used to compute the total bill by adding the costs)

2. Write a program to check whether a character is VOWEL (a, e, i, o, u) or CONSONANT using switch.

(6 points)