

MAD 3125 – S2018 E Mid Term Test (25%)

Date: Thursday, 28th June 2018

Time: 2 Hr.

Application Name: **StudentID_OntarioElectricityBill**

Screens & Specification

1. Splash screen with appropriate theme Marks (10)
2. Login Screens design Marks (10)
 - a. Email ID and Password with validation (user1@oeb.com/s3cr3t)
3. Create class **ElectricityBill** containing following fields Marks (10)
 - 1) Customer Name
 - 2) Account Number
 - 3) Meter Number
 - 4) Monthly Usage
 - 5) Price Plan
 - 6) Off Peak
 - 7) Mid Peak
 - 8) On Peak
 - 9) OESP Credit
 - 10) Contract Rate
 - 11) Total Bill Price
4. Electricity Bill Information Entry Screen Marks (30)

Step 1:
Enter your monthly electricity usage

Your monthly usage: kWh

Select your pricing plan: * ☒ Time-of-use Pricing ☐ Tiered Pricing

Adjust your consumption: (optional)

Off-Peak: %

Mid-Peak: %

On-Peak: %

Step 2:
Enter your Ontario Electricity Support Program (OESP) credit amount (if applicable)

Your OESP monthly credit (e.g. 30.00): \$

Optional:
See how your bill might look on a contract with an energy retailer

Enter the retail contract price: ¢/kWh

Calculate

5. Passing Data to next screen as an Object

Marks (10)

6. Electricity Bill Details Screen

Marks (30)

SAMPLE MONTHLY BILL STATEMENT	
Algoma Power Inc. - Main	
Account Number: 000 000 000 0000	
Meter Number: 0000000	
Your Electricity Charges	
Electricity	
Off-Peak @ 6.5 ¢/kWh	31.69
Mid-Peak @ 9.4 ¢/kWh	11.99
On-Peak @ 13.2 ¢/kWh	17.82
Delivery	
	53.11
Regulatory Charges	
	3.44
Total Electricity Charges	
	\$118.05
HST	
	15.35
8% Provincial Rebate*	
	(-\$9.44)
Total Amount	
	\$123.95

SAMPLE MONTHLY BILL STATEMENT	
Electricity Retail Contract	
Account Number: 000 000 000 0000	
Meter Number: 0000000	
Your Electricity Charges	
Electricity	
YOU ARE BUYING YOUR ELECTRICITY FROM: [ENERGY RETAILER NAME] *	
750 kWh @ 5.5 ¢/kWh	41.25
Global Adjustment	
	41.08
Delivery	
	49.02
Regulatory Charges	
	3.19
Total Electricity Charges	
	\$134.54
HST	
	17.49
8% Provincial Rebate	
	(-\$10.76)
Total Amount	
	\$141.26
* Energy retailer phone #: 1-888-000-0000	
Energy retailer website: www.*****.com	

Rules to calculate electricity bill:

❖ For Tiered rates

How much electricity you use

Rate (¢ per kWh)

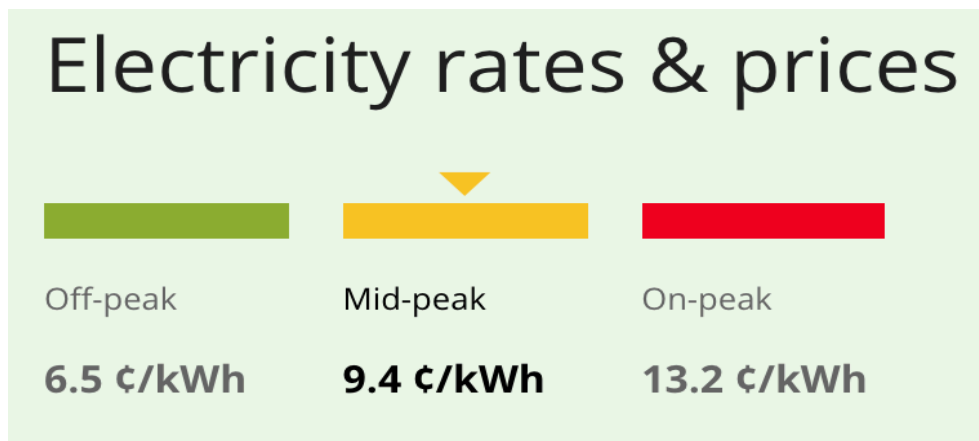
Up to 600 kWh

7.7

More than 600 kWh

8.9

❖ Time-of-use



❖ Delivery Charges

2% of Total monthly usages kWh

❖ Regulatory Charges

3.2% of Total monthly usages kWh

❖ Global Adjustment

80% of Total monthly usages kWh

Note:

- ✓ Appropriate screen design and data validation
- ✓ Upload ZIP file on Moodle

Wish You All the Best