

Babu Madhav Institute of Information Technology
5 years Integrated M.Sc. (IT) (1st Semester)
Subject – Fundamentals of Programming (CS3018)
CIE- 1
Set-A

Duration: 90 Minutes

Max. Marks: 30

- Q-1** Write a program to generate electricity bill for the customer of DGVCL where Electricity is provided to the customer by two sources: DGVCL and Solar panel installed at customer side. **[20]**
A company is managing data of their customer by keeping information like Customer ID, Contact Number, UnitGenerated and UnitConsumed. Calculate monthly bill amount to be paid by the customer based on following criteria:

Difference Unit	Rate per unit
< 50	3 Rs.
>=50 and <=100	3 Rs.(For first 50 unit) 5 Rs. (For next unit)
>=101 and <=150	3 Rs.(For first 50 unit) 5 Rs. (For 50-100 unit) 7 Rs. (For next unit)
151 and above	8 Rs. For all

Generate an electricity bill of each user in appropriate manner after calculating payment or remuneration.

Display the detail of customer if he/she receives remuneration from DGVCL.

Note:

1. Difference needs to be calculated using UnitConsumed – UnitGenerated.
2. Customer is eligible to pay the bill if UnitConsumed is more than UnitGenerated, otherwise DGVCL is liable to pay the difference to the customer (**Remuneration**).

- Q-2** Write a program to generate calculator to perform addition, subtraction, multiplication and division using switch case. Menu should be printed to select the option. **[10]**