

Unit III: Assessment Question Bank

Lecture 55

Q1

The following table gives average consumption hours for various loads in a typical household:

S.No.	Name of the Appliance	Wattage	Average consumption hours per day
1.	Air conditioner	2000W	1 Hour
2.	TV	50W	8 hours
3.	Three LED Bulbs	20W each bulb	6 hours each bulb
4.	Two Ceiling Fans	75W each fan	8 hours each fan
5.	Refrigerator	100W	24 hours
6.	Water Pump	750W	30 minutes

Considering a 30-day month, determine

- Total number of units consumed in a month
- Monthly bill for the above consumption units considering a domestic connection of 5KW sanctioned load with tariff details listed in a table below:

S.No.	Type of Charges	Tariff Details
1.	Fixed Charges for sanctioned load	Rs. 85/- for first KW Rs. 95/- for every additional KW
2.	Energy Consumption Charges	0 to 50 units ----- Rs. 4.1 per unit 51 to 100 units ----- Rs. 5.55 per unit 101 to 200 units ----- Rs. 7.1 per unit Above 200 units ----- Rs. 8.15 per unit
3.	Fuel Adjustment Charges	@ 14 Paisa per unit of energy consumed

Consider an overall tax of 9% on energy consumption charges.