

## Unit III: Three Phase Balanced Systems & Electrical Installations

### NOTES Class 54

#### Calculation of Energy Consumption

##### Step 1

- Calculate Watts per day consumption.

##### Step 2

- Convert to kiloWatts per day consumption.

##### Step 3

- Calculate energy uses over a month period.

##### Step 4

- Figure out the cost considering the rate.

#### Example:

Sl. No.	Item	Wattage	No. of Hours Working per Day	KWh per day
1	Lights	280	5	1.4
2	Fans	60 x 2	10	1.2
3	Geyser	2000	1/2	1
4	Mixer- grinder	750	1/3	0.25
5	Refrigerator	100	15	1.5
6	Freezer	300	4	1.2
7	Washing Machine	325	1	0.325
8	Iron	1000	1/2	0.5
9	Motor – 1 hp	746	1	0.746
10	Television	100	10	1
11	Laptop Charging	120	2	0.24
12	Mobile Charger	15	2	0.03
13	Internet Modem	8	24	0.192
14	Microwave	900	1	0.9
15	Vacuum Cleaner	350	1	0.35

Total Energy Consumption per day = 10.833 KWh

Total Energy Consumption in a month =  $10.833 \times 30 = 325$  KWh