Question Bank (G scheme)

Name of subject: ELEMENTS OF ELECTRONICS **Unit Test :I**

Subject code: 17215 **Course :IS/IE/EJ**

Semester: II

Chapter1 PASSIVE COMPONENTS (20 MARKS)

3 Marks

1) Differentiate between active & passive components.
2) Compare linear & logarithmic potentiometer.
3) write down color code for the following capacitors.
   1. 104
   2. 22k
   3. Orange, yellow, white
4) Classify the capacitors & give its application.
5) Differentiate between self & mutually induced inductor.
6) Compare AF & RF choke.

4 Marks

7) Write down color code for the following resistors
   1. 100Ω ,±10% 2. 5.6KΩ,±5%

8) Calculate values of resistors for following color code

   1. Red, yellow, violet, orange, gold

   2. brown, black, black, silver

9) Explain wire wound potentiometer with neat diagram(4)

10) Explain thermistors(4)

11) Write any Four Specifications of Resistor (4)

12) Explain electrolytic capacitor.(4)

13). Explain air gang capacitor(4)

14) Explain Trimmer capacitor(4)

15) Write any Four Specifications of Capacitor (4)

16) Explain ferrite core inductor with suitable diagram (4)

17) Explain slug tuned inductor with suitable diagram (4)

18) Explain toroidal inductor with suitable diagram (4)

19) Explain Faradays law of Electromagnetic Induction with Expression (both) (4)

20) Define the term:

1. Permeability

2. Reluctivity

3.Coefficient Of Coupling

4. Q factor of inductor (4)

Chapter2 SEMICONDUCTOR DIODE(24 Marks)

3 Marks

21) Explain specification of diode & give its application.(3)

4 Marks

22) Give symbol & applications of the following:

1. LED 2. Photodiode 3.Tunnel diode 4. Schottky diode

23) Explain experimental setup for forward biased PN junction diode & draw its VI Characteristics.

24) Explain VI characteristics of zener diode in forward & reverse bias with neat diagram.

25) Explain constructional details of PIN diode with diagram.

26) Explain constructional details of schottky diode with diagram.

27) Explain Tunnel diode with diagram.

28) Explain photo diode with diagram.

29) Explain LED with diagram.

30) Explain Laser diode with diagram.