

Question Bank (G scheme)

Name of subject: ELEMENTS OF ELECTRONICS

Subject code: 17215

Semester: II

Unit Test :I

Course :IS/IE/EJ

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. $100\Omega, \pm 10\%$
 2. $5.6K\Omega, \pm 5\%$
- 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.

