Electronics and Telecomunication

- 1. The main function of a capacitor is to (A) Block current flow (B) Help current flow *(C) Stores energy (D) Dissipate heat 2. An ideal voltage source will charge an ideal ideal capacitor (A) In infinite time (B) Exponentially * (C) Instantaneously (D) None of the above 3. Sparking occurs when a load is switched off because the circuit has *(A) High capacitance (B) High impedance (C) High inductance (D) High resistance 4. The turn on voltage on Ge junction diode is nearly-volt (A) 0.7* (B) 0.3 (C) 1.0 (D) 0.15. The peak inverse voltage (PIV) is the maximum reverse voltage that can be applied to a diode without (A) Burnout *(B) Destruction (C) Overheating (D) Charging 6. In the forward region of the characteristics a diode appears as (A) An OFF switch (B) A high resistance (C) A capacitor
- 7. Under small signal operation of a diode

*(D) An ON switch

- (A) Its bulk resistance increases
- *(B) Its junction resistance predominates
- (C) Its act like a closed switch
- (D) Its behave like a clipper

- 8. Which of the following junction has least junction capacitance
 - (A) Alloy
 - (B) Grown
 - (C) Diffused
 - *(D) Point contact
- 9. A tunnel diode is always biased
 - * (A) By dc source
 - (B) In the middle of its negative resistance region
 - (C) In the positive resistance region nearest zero
 - (D) In the reverse direction
- 10. A PIN diode is frequently used as a
 - (A) Peak clipper
 - (B) Voltage regulator
 - (C) Harmonic generator
 - *(D) Switching diode
- 11. The colour of the light emitted by a LED depends on
 - (A) Its forward bias
 - (B) Its reverse bias
 - (C) The amount of forward current
 - *(D) The type of semiconductor material
- 12. Silicon is invariably used in the manufacture of junction photodiodes because
 - *(A) Its thermally generated minority current is extremely small
 - (B) It is more roughed than Ge
 - (C) All of the above
 - (D) None of the above
- 13. The function of the base in the transistor is analogous to
 - (A) Plate in the triode
 - (B) Cathode in the triode
 - * (C) Grid in the triode
 - (D) Heater in the triode
- 14. Which one of the following is true of a bipolar transistor?
 - (A) Both base and emitter are heavily doped
 - *(B) Collector is lightly doped and the emitter is heavily doped
 - (C) Collector is heavily doped and the emitter is lightly doped
 - (D) Both the collector and emitter are heavily doped

| 15. In a transistor, the sign of arrow shows |
|---|
| (A) Holes flow out of emitter |
| (B) Electrons flow into the collector |
| *(C) Electrons flow out of the collector |
| (D) Holes flow out of the collector |
| 16. In a gymphal of the print of the gian of amony shows |
| 16. In a symbol of transistor the sign of arrow shows |
| *(A) Emitter |
| (B) Base |
| (C) Collector (D) Page and collector both |
| (D) Base and collector both |
| 17. When transistor is operating in active region |
| (A) Collector region is forward based |
| * (B) Collector region is reversed based |
| (C) Both collector junction and emitter junction are reversed based |
| (D) Both collector junction and emitter junction are forward based |
| |
| 18. The alpha of a transistor is |
| (A) 1 |
| * (B) 0.99 |
| (C) 20 |
| (D) 0.01 |
| 10 D (C ()) |
| 19. Beta of a transistor can exceeds |
| * (A) 1 |
| (B) 0.1 |
| (C) 0.01 |
| (D) 0 |
| 20. A permanent magnet will not attract steel |
| (A) Steel |
| (B) Nickel |
| (C) Aluminium |
| * (D) Copper |
| |
| 21. The unit of magnetizing force is |
| * (A) Ampere / meter |
| (B) Newton |
| (C) Tesla |
| (D) Ampere |

| 22. Magnets are of low retentivity but high permeability iron are called |
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| *(A) Electromagnets |
| (B) Permanent magnets |
| (C) Weak magnets |
| (D) One pole magnets |
| 23. Which of the following diode is used for voltage stabilization? (A) P – N junction * (B) Zener |
| (C) Tunnel (D) P I N |
| 24. Reverse current in a silicon junction nearly doubles for every°C |
| rise in temperature |
| (A) 10 ¹ |
| (B) 2 |
| * (C) 6 |
| (D) 5 |
| 25. The depletion region of a semiconductor diode is due to |
| *(A) Absence of current carriers |
| (B) Reverse biasing |
| (C) All of the above |
| (D) None of the above |
| 26. The term 'ground 'spoken in connection withy an electronic circuit means |
| (A) A direct connection to earth through a wire |
| *(B) A common connection for all components |
| (C) A short circuit |
| (D) Negative battery terminals |
| |
| 27. For doubling the current in a circuit of constant resistance the applied voltage must be |
| (A) Kept the same |
| *(B) Doubled |
| (C) Halved |
| (D) Quadrupled |
| 28. Electron volt is the unit of |
| (A) Voltage |
| *(B) Energy |
| (C) Current |
| (D) Power |
| |

- 29. When two resistors are connected in series they have
 - (A) Same resistance value
 - (B) Same voltage across them
 - *(C) Same current passing through them
 - (D) Different resistance value
- 30. When checked with an ohmmeter on open resistors read
 - *(A) Infinite
 - (B) Zero
 - (C) Low but not zero
 - (D) High but not infinite
- 31. Transistor is a
 - *(A) Current control current device
 - (B) Current control voltage device
 - (C) Voltage control current device
 - (D) Voltage control voltage device
- 32. When the people want to contact their person by written document, the documents are send through
 - (A) Railway coaches
 - (B) By the red van vehicles
 - (C) By aero planes
 - *(D) All of the above
- 33. Now a days people contact their person by
 - (A) Mobile phones
 - (B) By the land line phone connection
 - (C) By mail
 - *(D) All of the above
- 34. The uses of mobile phones saves
 - * (A) Valuable Time
 - (B) Valuable currency
 - (C) All of the above
 - (D) None of the above
- 35. Now a days the uses of mobile phones, house hold appliances, etc
 - (A) Effecting the universe
 - (B) Creating global warming
 - (C) Trees get effected by the heat, the air receives from the above appliances
 - *(D) All of the above

| 36. Children's are not suppose to use the mobile phones because *(A) The Ultra violation waves can damage the cells of the brain (B) The mobile phones are very dangerous (C) All of the above (D) None of the above |
|--|
| 37. Mobile phone are a source of (A) Pollution (B) Connecting people *(C) All of the above (D) None of the above |
| 38. When a land line connection fails, one should make a *(A) Complain to the authority (B) Call a mechanic (C) All of the above (D) None of the above |
| 39. For the transistor to work as an amplifier *(A) The base emitter junction should be forward base (B) Reversed based (C) All of the above (D) None of the above |
| 40. The output characteristics curve of a transistor is much more like these of (A) A diode *(B) A tetrode (C) A triode (D) A pentode |
| 41. Improper biasing of transistor results in *(A) Distortion in input signal (B) Excessive heating at collector terminal (C) Heavily loading of emitter terminal (D) All of the above |
| 42. The algebraic sum of all the currents meeting a junction is equal to (A) 1 (B) -1 *(C) Zero (D) Can't say |

| 43. Magnetic moment is the (A) Pole strength *(B)Vector quantity |
|---|
| (C) Scalar quantity(D) Universal constant |
| 44. A magnetic field exits around (A) Copper |
| (B) Iron |
| *(C) Moving charges |
| (D) Aluminum |
| 45. If one of the resistors in a parallel circuit is removed, what happens to the total resistance? |
| (A) Decreases |
| * (B) Increases |
| (C) Exactly doubles |
| (D) Remains constant |
| 46. Maximum power is transferred when the load resistance is *(A) Equal to source in resistance |
| (B) Equal to half source in resistance |
| (C) Equal to zero |
| (D) None of these |
| 47. 15: 4.11. 4.1. 4.1. 6.1. 1.1. |
| 47. Distribution transformers have core losses |
| (A) More than full load copper loss |
| (B) Equal to full load copper loss*(C) Less than full load copper loss |
| (D) Negligible to full load copper loss |
| (D) regulate to full four copper loss |
| 48. A transformer may have two or more ratings depending upon the type of (A) Insulation used |
| (B) Winding used |
| (C) Core used |
| *(D) Cooling used |
| 49. Breather mounted on transformer tank contains |
| *(A) Calcium |
| (B) Oil |
| (C) Water |
| (D) Liquid |

- 50. The power transformer is a constant ----- device.
 - (A) Current
 - (B) Voltage
 - *(C) Main flux
 - (D) Power

THE * INDICATES THE CORRECT ANSWER