

1. Medium wave broadcast band is from

- a) 530 kHz to 1600 kHz
- b) 3 MHz to 10 MHz
- c) 10 MHz to 30 MHz

2. Spark gap at the mast base is for the purpose of impedance matching

(True/False)

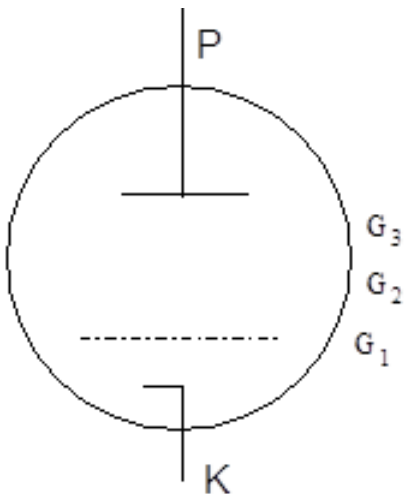
3. Multiple pads are made up of

- a) Resistances
- b) Resistances & capacitors
- c) Capacitors and Inductance

4. We take frequency response of studio chain by using

- a) Audio frequency generator
- b) Multi- frequency test record
- c) Standard test tape

5. The three grids G1, G2, G3 in a pentode valve are respectively called.



- a) Suppressor, Screen, Control
- b) Screen, Control, Suppressor
- c) Control, Screen, suppressor

6. The main advantage of crystal oscillator is :

- a) Its frequency is stable
- b) It is easily tunable
- c) It gives greater output.

7. In a MW transmitter, the modulator stage is

- a) Audio frequency amplifier
- b) Radio frequency amplifier
- c) A combined audio and Radio frequency amplifier

8. A receiver which is able to receive weak signal is called

- a) Sensitive b) Selective c) High quality

9. Efficiency of class A amplifier is about

a) 30% b) 50% c) 70% d) 90%

10. In class C amplifier, the valve conducts for

a) 360° b) 180° c) 120°

11. When P₁ is input power and P₂ is output power, the gain of an amplifier expressed in dB is

a) $\frac{P_2}{P_1}$ b) $20 \log_{10} \frac{P_2}{P_1}$ c) $10 \log_{10} \frac{P_2}{P_1}$

12. The signal to noise ratio of an amplifier should be

a) 70 dB b) -70 dB
c) 30 dB d) -30 dB

13. Equalisers are used to provide attenuation to the signal (True/False)

14. Which antenna is most commonly used with TV receiver.

a) Folded dipole b) Inverted 'L' c) Rhombic

15. In Indian TV system, the total RF channel width in VHF band

a) 6 MHz b) 7 MHz c) 8 MHz

16. In the tape recorder which magnetic head has the widest air gap

a) Erase head
b) Record head
c) Replay Head

17. The three primary colour beams in TV picture tube are

a) Red, Green, Blue
b) Yellow, Magenta, Green
c) Cyan, Pink, Blue

18. Ribbon microphone is

a) Uni-directional
b) Bi-directional
c) Omni-directional

19. For the level measurement in dBm, the reference level chosen is

a) 1 Watt b) 1 micro watt c) 1 milliwatt



20.

a) AND gate b) OR gate c) NOR gate

21. When all the inputs of AND gate are '1', the output of AND gate will be

a) 1 b) 0

22. The class of amplifier which provide maximum efficiency is

a) A b) B c) C

23. In a circuit, diode is used for

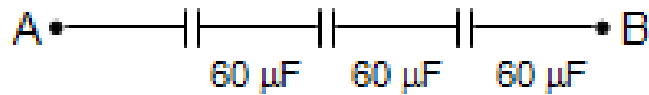
a) Matching b) Rectification
c) Amplification

24. VU meter is used for indicating

a) Level of programme

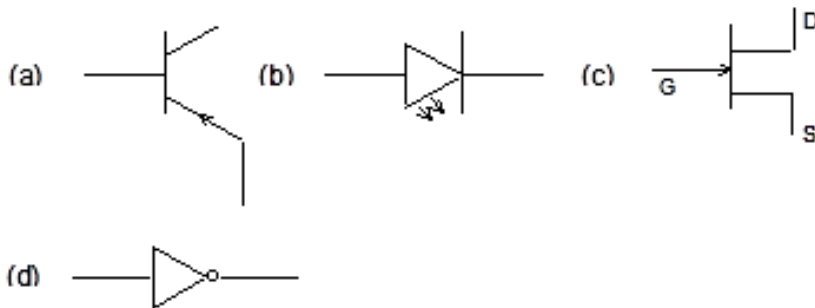
- b) Distortion of programme
 - c) Quality of programme
25. Double dipole aerial is used for
- a) Medium wave b) Shortwave
 - c) FM wave
26. 0 dBm is same as
- a) 10 milliwatt b) 1 milliwatt
 - c) 1 watt d) 10 watt
27. Electrical signal is converted into sound by
- a) Loudspeaker
 - b) Microphone
 - c) Monitoring amplifier
28. Dirty record and replay heads cause
- a) Wow and Flutter b) LF loss c) HF loss
29. Austin transformer is used at
- a) Switch gear room b) HT room
 - c) Mast base
30. For transmitting the signal to satellite, the frequency is in the range of
- a) 30 MHz to 60 MHz
 - b) 100 MHz to 200 MHz
 - c) 4 GHz to 6 GHz
31. Dish antenna is used to receive signals from
- a) ground waves b) Satellite
 - c) Ionosphere
32. In a TV studio chain, video signal passes through
- a) Camera amplifier, Video Switcher and White limiter
 - b) Video switcher, White limiter and Camera amplifier
 - c) Camera amplifier, White limiter and Video switcher
33. Immediately after microphone _____ is connected.
- a) Programme amplifier
 - b) Pre amplifier
 - c) Cue amplifier
34. Time delay relay is used at the transmitter to give sufficient time before the bias is put ON.
- a) To heat the crystal oven
 - b) To heat the filament
 - c) To close the doors
35. AVR is used to
- a) Heat the crystal oven
 - b) Supply a low voltage
 - c) Supply a constant voltage

36. Value of capacitance between A & B is



- a) $180 \mu\text{F}$
- b) $20 \mu\text{F}$
- c) $60 \mu\text{F}$

37. Write the name against each of the following symbols



38. Write the full form of the following

- a) SMPS
- b) LNBC
- c) dB
- d) PDA
- e) mH

39. Self radiating towers are used in TV transmitter stations (True/False)

40. Positive feed back in amplifier will result in oscillation (True/False)

41. The word "micro" prefixed before a scientific unit makes it to change to

- a) One millionth
- b) One thousandth
- c) Million times

42. Oscillator crystals are made up of

- a) Silicon
- b) Germanium
- c) Quartz

43. In frequency modulation

Amplitude of carrier remains constant

Frequency of the carrier remains constant

Both frequency & amplitude of the carrier remain constant

44. Heat sinks are provided to power transistor to dissipate heat. (True/False)

45. The expected value of earth pit resistance should be about

- a) 0.5 ohm b) 10 ohm
- c) 30 ohm d) 50 ohm

46. For a good transistor, the emitter to collector resistance should be about

- a) 0 ohm b) 250 ohm
- c) 25000 ohm

47. For a NPN transistor, the collector supply should be

- a) Positive b) Negative c) Grounded

48. For a feeder of 230 ohm impedance, the number of wires used in the feeder of 10 kW medium wave transmitter is normally,

- a) 4 wires b) 6 wires
- c) 2 wires d) 16 wires

49. Transformer oil is used in

- a) Filament transformer
- b) Austin transformer
- c) HT transformer
- d) All the above

50. For joining the feeder wire with another feeder wire you will use

- a) Line tap b) Soldering c) Threading