

1. Binomial filter is also called

- a. Maximally flat filter
- b. Equiripple filter
- c. Flat pass band filter
- d. Flat stop band filter

2. End fire antenna having direction of maxima along

- a. Array axis
- b. Perpendicular to axis
- c. 45 degree
- d. 90 degree

3. When the radiation resistance of the antenna matches the characteristic impedance of the transmission line?

- a) No transmission occurs
- b) No reception occurs
- c) SWR is maximum
- d) SWR is minimum

4. The radiation pattern of a half-wave dipole has the shape of a _____

- a) Doughnut
- b) Sphere
- c) Hemisphere
- d) Circular

5. What is the beam width for a half wave dipole antenna?

- a) 90°
- b) 180°
- c) 50°
- d) 250°

6. What does the beam width of an antenna tell us?

- a) Signal strength
- b) Signal power
- c) Directivity
- d) Degradation

7. What is the polarization of helical antenna in axial mode?

- a) Linearly Polarized
- b) Elliptical polarized
- c) Circularly polarized
- d) LHCP

8. What is the radiation resistance of the folded dipole antenna?

- a) 50Ω
- b) 100Ω

- c) 300Ω
- d) 20Ω

9. Radiation resistance is defined as

- a) Physical resistance
- b) Virtual resistance
- c) Wire resistance
- d) Input resistance

10. In a Yagi Uda antenna, the conductors that are not connected to the transmission line is called as?

- a) Driven element
- b) Parasitic elements
- c) Extra elements
- d) Array elements

11. Half power point is defined as

- a) 3 dB point
- b) 5 dB point
- c) 10 dB point
- d) 2 dB point

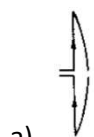
12. Radiation Fields of Infinitesimal Dipole following electric and magnetic field component will be non-zero

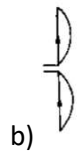
- a) $E_\phi = H_r = H_\theta \neq 0$
- b) $E_\theta = H_\phi \neq 0$
- c) $E_\phi = H_\theta \neq 0$
- d) $E_\phi = H_r \neq 0$

13. Find the radiation resistance of an infinitesimal dipole whose overall length is $\lambda/50$

- a) 31.6 ohm
- b) 3.16 ohm
- c) 316 ohm
- d) 0.316 ohm

14. Which is current distribution for $\lambda/2$ dipole antenna from following





15. If the diameter of a $\lambda/2$ dipole antenna is increased from $\lambda/100$ to $\lambda/50$ then its

- (a) Bandwidth increases
- (b) Bandwidth decreases
- (c) Gain increases
- (d) Gain decreases

16. Power density is basically termed as _____ power per unit area

- a. Reflected
- b. Refracted
- c. Radiated
- d. Diffracted

17. Under which conditions of charge does the radiation occur through wire antenna?

- a. For a charge with no motion
- b. For a charge moving with uniform velocity with straight & infinite wire
- c. For a charge oscillating in time motion
- d. For a static charge

18. How are the infinitesimal dipoles represented in terms of antenna length and signal wavelength?

- a. $l \leq (\lambda / 50)$
- b. $(\lambda / 50) < l \leq (\lambda / 10)$
- c. $l = \lambda / 2$
- d. $l = \lambda$

19. In an electrically small loop, the overall length of the loop is _____ one-tenth of a wavelength.

- a. Less than
- b. Equal to
- c. Greater than
- d. Not equal to

20. Cassegrain feed is used with a parabolic reflector to

- (A) increase the gain of the system
- (B) increase the bandwidth of the system

- (C) reduce the size of the main reflector
- (D) allow the feed to be placed at a convenient point

21. Directivity of antenna having beam area 2π

- a) 2
- b) 1
- c) 2.5
- d) 1.5

22. Radiation Pattern is defined as

- a) Distribution of radiation intensity with spherical coordinate
- b) Distribution of Poynting vector with spherical coordinate
- c) Beam area
- d) power radiated

23. Cutoff frequency is sharply defined in

- a) Binomial filter
- b) Chebyscheff filter
- c) Equiripple filter
- d) composite filter

24. Composite filter consist of

- a) Constant-k
- b) M-derived section
- c) terminating half section
- d) All

25. Filter is defined as

- a) Frequency selective circuit
- b) Amplitude selective circuit
- c) Frequency damping circuit
- d) Amplitude damping circuit

26. Notch filter is also called

- a) Band pass filter
- b) Band Reject filter
- c) Low pass filter
- d) High pass filter

27. for what frequency Microstrip patch antenna is used

a) Microwave frequency

b) VHF frequency

d) MF

d) HF

28. One steradian is equal to

a) 360 Square degree

b) 180 Square Degree

c) 3283 Square Degree

d) 41253 Square degree

29. When pitch angle of helical antenna is zero then helix become a _____

a) Loop antenna

b) Dipole antenna

c) Folded dipole

d) Linear wire

30. Characteristics of resistor in radio frequency is

a) Frequency dependent

b) Frequency independent

c) Constant

d) Linear