

<p>1. The basic requirements of transmitting antennas are:</p> <ul style="list-style-type: none"> a) High efficiency b) Low side lobes c) Large signal to noise ratio d) None of the mentioned <p>Answer: a</p>	<p>2. _____ is a device that converts electrons to photons or vice-versa.</p> <ul style="list-style-type: none"> a) Antenna b) Electron gun c) Photon amplifier d) Microwave tube <p>Answer: a</p>
<p>3. The number of patterns radiation pattern required to specify the characteristic are :</p> <ul style="list-style-type: none"> a) Three b) Four c) Two d) Five <p>Answer: a</p>	<p>4. The beam width of the antenna pattern measured at half power points is called:</p> <ul style="list-style-type: none"> a) Half power beam width b) Full null beam width c) Beam width d) None of the mentioned <p>Answer: a</p>
<p>5. The solid area through which all the power radiated by the antenna is:</p> <ul style="list-style-type: none"> a) Beam area b) Effective area c) Aperture area d) Beam efficiency <p>Answer: a</p>	<p>6. Power radiated from an antenna per unit solid angle is called radiation intensity.</p> <ul style="list-style-type: none"> a) True b) False <p>Answer: a</p>
<p>7) Power density is basically termed as _____ power per unit area</p> <ul style="list-style-type: none"> a. Reflected b. Refracted c. Radiated d. Diffracted <p>ANSWER: Radiated</p>	<p>8. Troposcatter antenna generally used is:</p> <ul style="list-style-type: none"> (A) Parabolic antenna (B) horn antenna (C) yagi antenna (D) helical antenna
<p>9. Q5. Impedance of a half wave folded dipole antenna is</p> <ul style="list-style-type: none"> (A) 100 ohms (B) 200 ohms (C) 300 ohms (D) 400 ohms <p>Answer: 300 ohms</p>	<p>Answer: Parabolic antenna</p> <p>10. One of the following is not an omnidirectional antenna:</p> <ul style="list-style-type: none"> (A) Half-wave dipole (B) Log-periodic (C) Discone (D) Marconi <p>Answer: Log-periodic</p>
<p>11. The discone antenna is</p> <ul style="list-style-type: none"> (A) useful direction finding antenna (B) used as a radar receiving antenna (C) circularly polarized like other circular antennas (D) useful as UHF receiving antennas <p>Answer: useful as UHF receiving antennas</p>	<p>12. A helical antenna is used for satellite tracking because of its</p> <ul style="list-style-type: none"> (A) circular polarization (B) maneuverability (C) broad bandwidth (D) good front-to-back ratio
<p>13. The standard reference antenna for the directive gain is the</p> <ul style="list-style-type: none"> (A) infinitesimal dipole (B) isotropic antenna (C) elementary doublet 	<p>Answer: circular polarization</p> <p>14. Q13. Which one of the following terms does not apply to the Yagi-Uda array?</p> <ul style="list-style-type: none"> (A) Good bandwidth (B) Parasitic elements (C) Folded dipole (D) High gain <p>Answer: High gain</p> <p>16. Which of the following consists of non-resonant antennas?</p> <ul style="list-style-type: none"> (A) The rhombic antenna

(D) half-wave dipole

Answer: isotropic antenna

15. Which of the following is very useful as a multiband HF receiving antenna?

(A) conical horn

(B) folded dipole

(C) log periodic

(D) square loop

Answer: log periodic

17. At what distance from the antenna does the far field start?

a) 2 wavelengths

b) 5 wavelengths

c) 10 wavelengths

d) 25 wavelengths

Answer: c

19. What happens when a vertical or horizontal polarized antenna receives a circular polarized wave?

a) Gain increases

b) Signal strength increases

c) Signal strength reduces

d) Cannot receive circular polarized waves

Answer: c

21. A dipole antenna is also called as?

a) Marconi antenna

b) Yagi antenna

c) Bidirectional antenna

d) Hertz antenna

Answer: d

24. The type of dipole antenna that has a higher band width is called as?

a) Conical antenna

b) Yagi antenna

c) Helical antenna

d) Marconi antenna

Answer: a

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

a) 90°

b) 180°

c) 50°

d) 250°

Answer: a

28. What is the power radiated by the antenna with gain called as?

a) Critical power

b) Transverse power

(B) The folded dipole

(C) The end-fire array

(D) The broadside array

Answer: The rhombic antenna

18. The Far field is also known as

a) Fresnel zone

b) Fraunhofer zone

c) Maxwell zone

d) Marconi zone

Answer: b

20. Which of the following devices assist in using the same antenna for transmission and receiving?

a) Monoplexer

b) Multiplexer

c) Duplexer

d) Switch

Answer: c

22. The impedance at the center of the antenna is known as?

a) Characteristic impedance

b) Radiation resistance

c) Transmission impedance

d) Recovery resistance

Answer: b

23. What happens 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

Answer: d

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

a) Doughnut

b) Sphere

c) Hemisphere

d) Circular

Answer: a

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

a) Signal strength

b) Signal power

c) Directivity

d) Degradation

Answer: c

29. What is the radiation pattern of an isotropic radiator?

a) Doughnut

- c) Effective radiated power
- d) Transmitted power

Answer: c

30. Which of the following antennas produce a vertical radiation pattern?

- a) Dipole antenna
- b) Yagi antenna
- c) Marconi antenna
- d) Hertz antenna

Answer: c

32). Which of the following is the function of the antenna?

- Converts photons to electrons
- Converts electrons to photons
- Converts electrons to neutrons
- Both a and b

34). Which of the following is the correct statement for isotropic radiation?

- It is a point source radiator
- It radiates uniformly in all directions
- Maintains uniform intensity
- All the above

36). What is the gain factor of an isotropic radiator in all directions?

- 1
- 0
- Infinity
- 0db

38). EIRP in an isotropic antenna stands for _____.

- Effective isotropic radiated power
- Equivalent isotropic radiation power
- Entropic isotropic radiated power
- Equivalent isolated radiated power

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

Answer: b

31. Which of the following devices assist in using the same antenna for transmission and receiving?

- a) Monoplexer
- b) Multiplexer
- c) Duplexer
- d) Switch

Answer: c

33). The characteristics of an antenna's radiation pattern can be represented in _____ number of ways.

- 2
- 3
- 4
- 5

35. Isotropic radiation is also known as _____.

- Omni-directional radiation
- Bi-directional radiation
- Tri- directional radiation
- None of the above

37). What is the gain factor (in dB) of an isotropic radiator in all directions?

- 1
- 0
- Infinity
- 0db

39. Radiation is plotted graphically in terms of _____.

- Angular position and radial distance
- Angular position and Angular distance
- Distance and radiation

40. Radiation patterns can be represented in terms of _____ types.

- Field patterns
- Power patterns
- Both a and b
- Direction pattern

42. A 2-D radiation pattern graph contains how many coordinates?

- 2
- 3
- 5
- 1

43. Which of the following statement is true related to the major lobe?

- It is a radiated part that covers maximum area
- It is a radiated part that covers a minimum area
- Both a and b
- It is a radiated part that covers the average area

45. Which of the following statement is true related to the minor lobe?

- It is a radiated part that covers maximum area
- It is a radiated part that covers a minimum area
- Both a and b
- It is a radiated part that covers the average area

48. Which of the following is the correct statement of beam angle?

Radiation and beam angle

41). Which of the following statement is true for field patterns?

- It is a logarithmic graph plotted against the electric field function and magnetic field function.
- It is a logarithmic graph plotted against the square of electric field function and magnetic field function.
- It is a logarithmic graph plotted against the square of the magnitude electric field function and magnetic field function.
- It is a logarithmic graph plotted against the square of the magnitude of electric field and magnetic field.

44. A 3-dimensional radiation pattern graph contains how many coordinates?

- 3
- 4
- 2
- 1

46. Which of the following statement is true related to the back lobe?

- It is a radiated part that covers maximum area
- It is a radiated part that covers a minimum area
- Both a and b
- It is exactly opposite to the maximum lobe

47. Which of the following is the example of an isotropic radiator?

- Point source
- All direction source

- It is an angle between half power point of the main lobe
- It is an angle between power point of the main lobe and side lobe
- It is an angle between half power point of side lobe
- None of the above

50. Beam efficiency is the ratio between main beam area and _____.

- Total beam area radiated
- Minimum beam area
- Half a beam area
- None of the above

52. Which of the following is true regarding linear polarization?

- It maintains wave propagation in a single direction
- It maintains wave propagation in multiple directions
- It maintains wave propagation in the bi direction
- None of the above

- Bi directional source

- Both a and b

49. Which of the following is the unit of beam area?

- Watts
- Hour
- Degrees
- Centimeters

51. Antenna can be polarized in _____ ways.

- 1
- 2
- 3
- 4

53. In a linear polarization which of the following parameter relies on the same plane.

- Electric field vector
- Magnetic field vector
- EM vector
- None of the above