## **IMPORTANT QUESTIONS**

- Q1. Give Relation between current distribution and field pattern of antenna.
- Q2. Draw radiation pattern for horizontal and vertical dipole.
- Q3. Explain input impedance broadband matching.
- Q4. Derive the expressions for field components of a short dipole.
- Q5. Explain concept of antenna impedence.
- Q6. Explain Antenna temperature.
- Q7. Describe antenna pattern and antenna parameters.
- Q8. Find radiation resistance and directivity of an infinitely small dipole.
- Q9. Explain various potentials used in antenna theory.
- Q10. Explain effect of ground on antenna pattern.
- Q11. Obtain field expressions for a half wave dipole.
- Q12. Give wave equation for radiated fields in terms of electric scalar and magnetic vector potential.
- Q13. Explain principle of pattern multiplication with example.
- Q14. What is an endfire array? Deduce an expression for the radiation pattern of an N-element endfire array. Sketch the radiation pattern for a four element endfire array in horizontal and vertical planes.
- Q15. What is a broadside array? Deduce an expression for the radiation pattern of an N-element broadside array. Sketch the radiation pattern for a four element broadside array in horizontal and vertical planes.
- Q16. Plot radiation pattern for two element broadside and end fire array
- Q17. What is horn antenna? Give its design equations.
- Q18. Explain Log periodic and Microwave antennas with their design considerations.
- Q19. Explain skip distance.
- Q20. Explain Duct propagation and super refraction.
- Q21. Explain Ionospheric propagation and effect of earth on it.
- Q22. Differentiate between ground wave and Space wave propagation.
- Q23. Describe picture tube. Differentiate picture and sound transmission and reception.
- Q24. Explain image orthicon and vidicon.
- Q25 . Explain elements of a TV system.