XII-PHYSICS-IMPORTANT LAWS

(Expect any two for public examination)

1. State Coulomb’s law in electrostatics.
2. State one coulomb.
3. State Gauss’s law in electrostatics.
4. State Ohm’s law.
5. State Kirchoff’s current law.
6. State Kirchoff’s voltage law.
7. State Faraday’s first law of electrolysis.
10. Define Seebeck effect.
11. Define Peltier effect.
12. Define Peltier coefficient.
14. Define positive Thomson effect.
15. Define negative Thomson effect.
17. Define Thomson’s coefficient.
18. Define Maxwell’s right hand cork screw rule.
19. Define right hand palm rule.
20. State Biot-Savart’s law.
22. State ampere’s circuital law.
23. Define end rule.
24. State fleming’s left hand rule.
25. Define ampere.
27. State Faraday’s first law of electromagnetic induction.
28. State Lenz law.
29. State Fleming’s right hand rule or generator rule.
30. State Huygens principle.
31. What is Rayleigh’s scattering law?
32. What is Tyndall’s scattering?
33. What are stokes lines?
34. What are anti-stokes lines?
35. What are newton’s rings?
36. State Brewster’s laws.
37. Write the postulates of Laue’s experiment.
38. State Bragg’s law.
39. State Mosley’s law.
40. Write the postulates of Einstein’s special theory of relativity.
41. Define one curie.
42. Define one Roentgen.
43. State De-Morgan’s theorems.

Point wise questions in three mark
(Expect any two for public examination)

1. Three properties of electric line of forces.
2. Applications of capacitors.
3. Applications of superconductors.
4. Applications of secondary cells.
5. Properties of nichrome wire.
6. Special features of magnetic Lorentz force.
7. Limitations of cyclotron.
8. How will you increase the current sensitivity?
10. Methods of producing induced emf.
11. Uses of UV rays.
12. Uses of IR rays.
13. Uses of Raman spectrum.
15. Conditions for getting clear and broader interference.
16. Depending factors of optical rotation.
17. Postulates of Thomson atom model.
18. Postulates of Rutherford’s atom model.
19. Postulates of Bohr’s atom model.
20. Postulates of Sommerfeld’s atom model.
21. Drawbacks of Thomson’s atom model.
22. Drawbacks of Rutherford’s atom model.
23. Shortcomings of Bohr’s atom model.
24. Shortcomings of Sommerfeld’s atom model.
25. Applications of Mosley’s law.
26. Industrial applications of X-rays.
27. Scientific research applications of X-rays.
30. Industrial applications of laser.
31. Medical applications of laser.
32. Applications of electron microscope.
33. Types of biological hazards of nuclear radiation.
34. Uses of nuclear reactors.
35. Advantages of negative feedback.
36. Characteristics of OP-AMP.
37. Advantages of integrated circuits.
38. Applications of CRO.
39. Advantages of AM.
40. Drawbacks of AM.
41. Advantages of FM.
42. Disadvantages of FM.
43. Applications of RADAR.
44. Characteristics of digital communication.
45. Disadvantages of digital communication.
46. Advantages of optical fiber communication.
47. Disadvantages of satellite communication.

Point wise questions in five mark
(Expect any two for public examination)

1. Properties of electric lines of forces.
2. Applications of superconductors.
3. Special features of magnetic Lorentz force.
5. Applications of electromagnetic waves.
6. Applications of polaroids.
7. Properties of cathode rays.
10. Applications of photoelectric cells.
11. Applications and disadvantage of electron microscope.
13. Properties of Beta rays.
15. Explanation for binding energy curve.
17. Properties of neutrons.
18. Applications of radio isotopes.
19. Advantages and applications of optical fiber communication.
20. Advantages of satellite communication.

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