Karnataka 2nd PUC Physics Important Questions 2026

Here you can find Karnataka 2nd PUC Physics Important questions to practice for the upcoming exams.

PART – A

1. **A charged particle moving in a circular path in a uniform magnetic field. Then choose the wrong**

statement among the following:

(a) Radius of the circular path varies directly with its velocity.

(b) Radius of the circular path varies inversely with the magnetic field.

(c) Frequency of revolution varies directly with the charge.

(d) Frequency of revolution varies directly with the kinetic energy of charge

2. Kirchoff's junction rule is based on the conservation of:

(a) mass

(b) momentum

(c) energy

(d) charge

3. A galvanometer can be converted into a voltmeter by connecting:

(a) a low resistance in series with it.

(b) a high resistance in parallel with it.

(c) a low resistance in parallel with it.

(d) a high resistance in series with it.

4. The total energy of an electron revolving in nth orbit of hydrogen atom is the least for:

(a) n = 3

(b) n = 1

(c) n = 2

(d) n = 4

5. **Which of the following electromagnetic waves are used to kill germs in water purifiers?**

(a) Microwaves

(b) Infrared waves

(c) Ultraviolet rays

(d) Gamma rays

6. **The process of emission of electrons from a metal surface by applying high electric field is called**

(a) thermionic emission

(b) photoelectric emission

(c) field emission

(d) secondary emission

Fill in the blanks by choosing the appropriate answer given in the bracket for ALL the following questions:

[90°, magnitude, magnetization, work function, 0°, polarity]

7. The net magnetic moment acquired per unit volume of a sample is called _____.

8. Lenz's law gives the _____ of the induced emf.

9. The phase difference between voltage and current in a pure resistive AC circuit is _____.

10. If the angle of incidence for a ray of light in denser medium is equal to critical angle, then the angle of refraction in rarer medium is equal to_____.

11. The minimum energy required by an electron to escape from the metal surface is called_____.

PART – B

III. Answer any FIVE of the following questions:

12. Define electric flux through an area element. Mention its SI unit.

13. What is meant by equipotential surface? Draw equipotential surfaces for an electric dipole.

14. Write any two limitations of Ohm's law.

15. Mention the two factors on which self-inductance of a solenoid depends.

16. What is displacement current? Write the mathematical form of Ampere-Maxwell law.

17. Give any two limitations of Bohr's atomic model.

18. List out two differences between p-type and n-type semiconductors.

PART – C

Mention any three properties of magnetic field lines.

19. Describe the coil and bar magnet experiment to demonstrate the phenomenon of electromagnetic induction.

What is Lorentz force? Write the expression representing this force and explain the terms.

20. State and explain Gauss's law in magnetism. Give its significance.

21. Show that the focal length of spherical mirror is equal to half of its radius of curvature.

22. The work function of cesium is 2.14 eV. Calculate the threshold frequency for cesium.

23. Mention three features of nuclear force.