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WORKSHEET – II

PHYSICS(X)

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| Q 1 | Can a freely suspended current carrying solenoid stay in any direction? Justify your answer. What will happen when the direction of current in the solenoid is reversed? Explain. | 3 |
| Q 2 | What is an electromagnet? How can we determine north and south pole of an electromagnet with the help of magnetised iron bar. | 3 |
| Q 3 | Explain the term overloading and short circuiting. | 3 |
| Q 4 | List in tabular form two major differences between electric motor and a generator. | 2 |
| Q 5 | Mention the provision of two different current ratings in our domestic circuits. Explain with reason, the advantage of such a provision. | 2 |
| Q 6 | Mention the frequency of A C supply in India. State two important advantages of alternating current over direct current. | 2 |
| Q 7 | Explain the function of fuse in a domestic electric circuit? An electric oven having power rating 2000W, 220V is used in an electric circuit, having a fuse of 5A rating. What is likely to happen when the oven is switched on? Explain. | 5 |
| Q 8 | Draw a schematic labelled diagram of domestic electric circuit. | 5 |
| Q 9 | Can two magnetic lines of force intersect each other? Give reasons in support of your answer. | 1 |
| Q 10 | Is it possible to change the polarity of an electromagnet? Give any two uses of electromagnets. | 2 |
| Q 11 | Explain the phenomenon of electromagnetic induction. | 3 |
| Q 12 | Mention the colour convention for live, neutral and earth wires. | 1 |
| Q 13 | A stationary charge is placed in a magnetic field. Will it experience a force? Give reason to justify your answer. | 2 |
| Q 14 | Why are magnetic field lines more crowded towards the pole of a magnet? | 1 |
| Q 15 | The magnetic field in a given region is uniform. Draw a diagram to represent it. | 1 |
| Q 16 | Write the statement of generator rule. | 1 |
| Q 17 | Explain the magnetic effects of current with the help of an activity along with labelled diagram. | 2 |
| Q 18 | What is solenoid? Draw the pattern of magnetic field formed around a current carrying solenoid. | 3 |
| Q 19 | The deflection of compass needle increases as it is moved towards the pole of a bar magnet. Why? | 2 |
| Q 20 | An alpha-particle enters, a uniform magnetic field at right angles to it as shown in figure. Stating the relevant principle explain in which direction will this alpha- particle move? | 2 |