UNSOLVED

| Physics | 9th Class (2022) | Lahore Board |
|---|---|---|
| Time: 1:45 Hours | Subjective Type | Marks:48 |

## GROUP – II

## Part – I

**2** **Write short answers to any Four (4) questions:** (10)

i. Define prefixes and give two example.

ii. Differentiate between rest and motion.

iii. Define force and write down its SI units.

iv. State the law of conservation of momentum.

v. What is meant by base units and derived units?

vi. Write any two differences between mass and weight.

vii. Define random motion and write down one example.

viii. Write down the SI units of temperature electric current force and electric charge.

**3** **Write short answers to any Four (4) questions:** (10)

i. Define Torque and Moment Arm.

ii. What is meant by plumb line?

iii. What is meant by geostationary orbit?

iv. Describe law of gravitation and Newton's third law of motion.

v. How the value of 'g' varies with altitude?

vi. Define Work and its SI unit.

vii. Define Biomass Energy and Geothermal Energy.

viii. What is meant by Power and Watt?

**4** **Write short answers to any Four (4) questions:** (10)

i. Why does the atmospheric pressure vary with weight?

ii. State Hooks Law.

iii. Define pressure and write its formula.

iv. Differentiate between temperature and heat.

v. Define latent heat of fusion.

vi. Conduction of heat does not take place in gases, give reason.

vii. What is meant by Convection Current?

viii. Write two uses of good conductors.

## Part – II

**Note: Attempt any TWO questions.**

**5** (a) Derive the second equation of motion with the help of speed time graph.

(b) How much the force of friction between a wooden block of mass 5 kg and the horizontal marble floor? The coefficient of friction between wood and the marble is 0.6.

**6** (a) What is meant by Kinetic Energy? Derive its equation.

(b) A force is acting on a body making an angle of 30° with the horizontal. The horizontal component of the force is 20 N. Find the force.

**7** (a) Derive an equation for the pressure at some depth in a liquid

(b) How much heat is required to increase the temperature of 0.5 kg of water from 10° C to 65° C.