UNSOLVED

Physics	Gujranwala Board Group-II	Paper-I
Time: 1:45 Hrs.	9th Class 2023	Marks: 48

(Subjective)

NOTE: Section I is compulsory. Attempt any TWO (2) questions from Section II.

(Section-I)

2 Write short answers to any FIVE (5) questions.(5×2=10)

What is Vernier calipers? Write down the least count of digital Vernier calipers.

Write down rules to find the significant figures in measurement.

Define Physics.

Differentiate between scalars and vectors quantities.

What is meant by uniform acceleration?

Differentiate between translator motion and linear motion.

Define inertia and momentum.

Write down two advantages and disadvantages of friction.

3 Write short answers to any FIVE (5) questions.(5×2=10)

Define the centre of gravity.

ii A mechanic tightens the nut of a bicycle using a 15cm long sdpanner by exerting a force of 200N. Find the torque that has tightened it.

iii What is meant by principle of moments?

iv Define Newton's Law of gravitation.

v Define stable equilibrium.

vi What are Geostationary Satellites?

vii What is meant by solar cell?

viii Define electrical energy.

4 Write short answers to any FIVE (5) questions.(5×2=10)

i State Pascal's law. Write down applications of this law in daily life.

ii Define Young's modulus.

iii What is meant by elasticity?

iv Differentiate between temperature and heat.

v Change 300K temperature on Kelvin scale into Celsius scale of temperature.

vi Write down any two factors on which rate of flow of heat depends.

vii What causes a glider to remain in air?

viii Write down the names of four faces of Leslie cube.

(Section-II)

Note: Attempt any TWO (2) questions.

5 (a) Prove third equation of motion by the use of speed-time graph. (4)

(b) A body has weight 20N. How much force is required to move it ertically upward with an acceleration of $2ms^{-2}$? (5)

6 (a) Calculate the mass of earth with the help of law of gravitation. (4)

(b) The steering of a car has a radius 16cm. Find the torque produced by a couple of 50N. (5)

7 (a) Explain volume thermal expansion in solids and define temperature coefficient of volume expansion. (4)

(b) A student presses his palm by his thumb with a force of 75N. What would be the pressure under his thumb having contact area $1.5cm^2$? (5)