Physics (New Scheme)	Ninth Gujranwala Board 2019	Paper – I
Time:1.45 hrs	Subjective	Marks : 48

(Group – I)

Note: Section I is compulsory. Attempt any two (2) questions from Section II.

SECTION-I

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

i. What is stop watch write the least count of mechanical stop watch.

ii. How to use a measuring cylinder?

iii. A chocolate wrapper is 6.7 cm long and 5.7 cm wide, calculate its area upto reasonable number of significant figures.

iv. Represent a force of 80 N acting towards North of East.

v. Differentiate between the circular motion and rotatory motion.

vi. When a gun is fired it recoils why?

vii. Write four methods of reducing friction.

viii. How Banking of Road makes safe to drive vehicle?

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

i. Differentiate between like and unlike parallel forces.

ii. What is meant by rigid body?

iii. Give two uses of artificial satellites.

iv. State law of gravitation and write its mathematical formula.

v. What is meant by Global Positioning System? What is its use?

vi. Define potential energy and write its mathematical formula.

vii. Differentiate between solar cell and solar panels.

viii. Calculate power of a machine which works 4 J in 2 seconds.

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

i. State Pascal Law.

ii. What is the density of an object? Write its formula.

iii. State principle of floatation.

iv. Define temperature and heat.

v. What is the use of thermometer?

vi. On what factors radiation depends?

vii. Define gliding.

viii. What is meant by land breeze and sea breeze?

SECTION – II

5.(a) Derive the second equation of motion with the help of speed-time graph. 4

(b) How much centripetal force is needed to make a body of mass 0.5 kg to move in a circle of radius 50cm with the speed 3 ms^{-1}. 5

6.(a) Explain two conditions of Equilibrium 4

(b) A 500 g stone is thrown up with a velocity of 15 ms^{-1}. Find its: 5

i) P.E at its maximum height

ii) K.E when it hits the ground

7.(a) Describe Linear thermal expansion in solids and prove that: $\alpha = \frac{\Delta L}{L_0 \Delta T}$ 4

(b) A wooden cube of sides 10 cm each has been dipped completely in water. Calculate the upthrust of water acting on it. 5