Physics (New Scheme)	9th...2018 Gujranwala Board	Paper-I (Essay Type)
Time: 1:45 Hours	(Group-II)	Max Marks: 48

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

(i) Define physics. Write down the names of its two branches.

(ii) Define scientific notation.

(iii) Define physical quantities and give two examples.

(iv) Define velocity and write its equation.

(v) Differentiate between rotatory motion and vibratory motion.

(vi) State Newton's first law of motion.

(vii) Differentiate between rolling and sliding friction.

(viii) Define force and write its SI unit.

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

(i) Define the axis of rotation.

(ii) Define centre of gravity. Where is the centre of gravity of a uniform triangular sheet?

(iii) What are artificial satellites?

(iv) State law of gravitation.

(v) Define field force.

(vi) Define power. Write its SI unit.

(vii) Define geothermal energy and elastic potential energy.

(viii) Define "joule", the unit of energy.

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

(i) Write two features of kinetic molecular model.

(ii) State Pascal's law.

(iii) Define stress and write its unit.

(iv) What is meant by "internal energy of body"?

(v) Define latent heat of fusion.

(vi) Differentiate between conductor and insulator.

(vii) Define rate of flow of heat and write its formula.

(viii) Differentiate between land breeze and sea breeze.

PART-II

5. (a) Differentiate between distance and displacement. Also explaint it. (4)

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

6. (a) What is the difference between wind energy and geothermal energy? (4)

(b) A man is pulling a trolley on a horizontal road with a force of 200N making an angle of 30° with the road. Find the horizontal and vertical components of the force. (5)

7. (a) What is thermometer? Explain liquid-in-glass thermometer. (4)

(b) The head of a pin is a square of side 10mm. Find pressure on it due to a force of 20N. (5)