Bahawalpur Board 2017 (First Group)

Roll No.(in Figures): ..... (in Words): .....

Maximum Marks: 48 **(SUBJECTIVE TYPE)** Time Allowed :1.45 Hours

PART- I

Q2. Write short answers to any FIVE (5) questions: **(5×2=10)**

(i) Define physics.

(ii) Estimate your 14 years age in seconds.

(iii) What is meant by zero error and zero correction?

(iv) Write the second and third equation of motion in mathematical form.

(v) Define gravitational accleration.

(vi) Differentiate between circular motion and rotatory motion.

(vii) Define the centrifugal force.

(viii) Give two differences between mass and weight.

Q3. Write short answers to any FIVE (5) questions: **(5×2=10)**

(i) What is meant by resultant of forces?

(ii) Describe the line of action of a force.

(iii) Define moment arm of a forces?

(iv) What is meant by gravitational force?

(v) On what factors, the orbital speed of satellite depends?

(vi) Define artificial satellites.

(vii) Write the types of mechanical energy.

(viii) What is watt? define it.

Q4. Write short answers to any FIVE (5) questions: **(5×2=10)**

(i) Write two features of kinetic molecular model of matter.

(ii) What is meant by plasma? In this gas occurs in which state.?

(iii) State principle of floatation.

(iv) What is meant by internal energy?

(v) Define specific heat capacity.

(vi) What is meant by conduction?

(vii) Define thermal conductivity.

(viii) Write name of two expert thermal riders.

PART - II

Note: Attempt any TWO questions. **(9×2=18)**

Q5. (a) State Newton's first law of motion and explain with examples. 4

(b) A stone is dropped from the top of a tower. The stone hits the ground after 5 seconds. Find (i) The height of the tower. (ii) The velocity with which the stone hits the ground. 5

Q6. (a) How can a force "F" be resolved into its perpendicular components F_x and F_y? 4

(b) A stone of mass 500 g strikes the ground with a velocity of $20ms^{-1}$. How much is the Kinetic Energy of the stone at the time it strikes the ground? 5

Q7. (a) Define Pressure. Also explain that pressure in liquid increases with increase in depth. 4

(b) How much heat is required to increase the temperature of 0.5kg of water from 10°C to 65°C? 5