Bahawalpur Board 2017 (Second 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 base and derived quantities.

(ii) Write two rules to find the significant digits in a measurement.

(iii) Define atomic physics and nuclear physics.

(iv) Draw the graph of constant Speed.

(v) Differentiate between speed and velocity.

(vi) Convert $50kmh^{-1}$ speed of a body into ms^{-1}.

(vii) Define force and write the name of its unit.

(viii) Define inertia.

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

(i) Define parallel forces. Write the names of its types.

(ii) Define torque and write its formula also.

(iii) What is meant by centre of mass?

(iv) Define force of gravitation.

(v) Define field force.

(vi) Give the rason why gravitational force is very low?

(vii) Write two process for the emission of nuclear energy.

(viii) Write two sources of non - renewable energy.

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

(i) What is Pascal's law?

(ii) Describe the principle of floatation.

(iii) Define Hooke's Law.

(iv) What is latent heat of fusion?

(v) Define evaporation.

(vi) What is meant by convection currents?

(vii) Define green house effect.

(viii) Define rate of flow of heat.

PART - II

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

Q5. (a) Write four differences between mass and weight. 4

(b) A car starts from rest. Its velocity becomes $20ms^{-1}$ in 8 seconds. Find acceleration. 5

Q6. (a) What is centre of gravity? Explain how do you find the centre of gravity of an irregular shaped thin lamina? 4

(b) Calculate the power of a pump which can lift 200 kg of water through a height of 6 m in 10 seconds. 5

Q7. (a) Define Young's modulus. Derive mathematical equation. 4

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