

9th CLASS GUESS PAPER- 2022

PHYSICS.

UNIT NO. 1 PHYSICAL QUANTITIES AND MEASUREMENT.

SHORT QUESTIONS.

1. Describe two advantages of physics in daily life.
2. Define Plasma Physics and Geophysics.
3. Define Base quantities and write names to four base quantities.
4. Define base and derived quantities.
5. What is meant by prefixes? Write an example.
6. Define Scientific notation.

LONG QUESTIONS.

1. A Chocolate wrapper is 6.7 cm long and 5.4 cm wide. Calculate its area upto reasonable number of significant figures.
2. Your hair grow at their of 1 mm per day Find their growth rate in nm s⁻¹

UNIT NO. 2 KINEMATICS.

SHORT QUESTIONS.

1. Define Translatory motion and give an example.
2. Define Random motion and give example.
3. Define vibratory motion and give its example.
4. Define velocity and SI Unit of velocity.
5. Difference between Scalar and Vector.
6. Define acceleration and write its SI unit.

LONG QUESTIONS.

1. Prove with the help of graph $V_f = V_i + at$
2. Derive Second equation.
3. Derive equation of motion with the help of speed – time graph.

UNIT NO. 3 DYNAMICS.

SHORT QUESTIONS.

1. State Newton's first law of motion.
2. Difference between Mass and Weight.
3. Define Newton's 3rd law of motion. Give an example.
4. Why rolling friction is less than sliding friction.
5. What is meant by Braking and skidding?
6. What is meant by tension of string?
7. Define co-efficient of friction and it's write it equation.
8. Define Centripetal force and centrifugal force.

LONG QUESTIONS.

1. Write the advantages and disadvantages of friction.
2. Problem : 3.8 , 3.10

UNIT NO. 4 TURNING EFFECT OF FORCES.

SHORT QUESTIONS.

1. What are like and unlike parallel forces?
2. Define Resolution of forces.
3. Define rigid body and line of action of forces.
4. Define Equilibrium.
5. What is meant by neutral equilibrium?
6. State second condition for equilibrium and write its formula.
7. What is meant by unstable equilibrium?

LONG QUESTIONS.

1. Define torque or moment of force. Explain on what factors does it depend?
2. State and explain in conduction for equilibrium.
3. Problem: 4.9

UNIT NO. 5 GRAVITATION.

SHORT QUESTIONS.

1. Why law of Gravitation is important to us?
2. Define law of gravitation and write its equation.
3. What is gravitational field?
4. Define field force and gravitational field strength.
5. Give the orbital speed formula for Artificial Satellite.
6. How the mass of earth can be determine.
7. Define field force.
8. What are natural satellite?
9. Difference between 'G' and 'g'.
10. Write the value of "G" and write SI unit.

LONG QUESTIONS.

1. Determine the mass of earth using the law of gravitation.
2. Derive the equation of motion of artificial satellites.

UNIT NO. 6 WORK AND ENERGY.

SHORT QUESTIONS.

1. Define Jule.
2. What is meant by light energy?
3. Define potential energy and write its equation.
4. What is meant by Nuclear Energy?
5. Write down the two disadvantages of fossil fuels.
6. Define efficiency and write its equation.
7. What is meant by power? Define its SI Unit.
8. On which factors work depend.

LONG QUESTIONS.

1. Write the four uses of solar energy.
2. Explain electrical energy and sound energy.
3. Example No. 6.7 ; Problem : 6.6

UNIT NO. 7 PROPERTIES OF MATTER.

SHORT QUESTIONS.

1. The mass of 200 cm³ of stone is 500 gram. Find its density.
2. Define features of kinetic molecular model of matter.
3. Define Hooke's law
4. State Young's Modulus.
5. Define Density and Elasticity.
6. Define Pressure and give it unit.
7. Why does a piece of stone sink in water but a ship with a huge weight floats
8. Define elasticity.
9. Differentiate between Stress and Strain.
10. State the Pascal's law.
11. State Archimedes principle.

LONG QUESTIONS.

1. Problem : 7.9
2. State Pascal's law and explain hydraulic press

UNIT NO. 8 THERMAL PROPERTIES OF MATTER.

SHORT QUESTIONS.

1. How does heating affect the motion of molecules of a gas?
2. Convert 100 °F temperature into Celsius scale.
3. Define Specific heat.
4. Difference between heat and temperature.
5. Define Latent Heat of fusion.
6. Why gaps are left in railway tracks?
7. Define lower and fixed points.

LONG QUESTIONS.

1. Define linear thermal expansion in solids. Derive its formula.
2. Problem : 8.3

UNIT NO. 9 TRANSFER OF HEAT.

SHORT QUESTIONS.

1. Write name of two expert Thermal riders.
2. What is meant by convection currents?
3. Difference between land and sea breezes?
4. Define Radiation.
5. Define convection and conduction.
6. Define thermal conductivity of the substance.
7. We wear white and light coloured clothes in summer why?
8. Write two use good conductor.

LONG QUESTIONS.

1. Define Specific heat. How would you find the specific heat of a solid?