

MODEL PAPER TERM - I

CLASS: 9th
SUBJECT: SCIENCE

TIME: 2 HRS
MAX. MARKS:40

PHYSICS

Q1. Explain uniform and non-uniform motion with examples. (5)

Or

A train starting from rest attains a velocity of 72 kmh^{-1} in 5 minutes. Assuming that the acceleration is uniform. Find

- the acceleration
- the distance travelled by the train for attaining this velocity

Q2. Define relative density? Find the density of silver in SI Unit. If the relative density of Silver is 10.8? (The density of water is 10^3 kgm^{-3}) (3)

Q3. Explain mathematical formulation of second law of motion (2)

Q4: - Multiple Choice Questions: (3)

a) Which has more inertia

- (i) a rubber ball (ii) a train (iii) a five-rupee coin (iv) cricket ball

(b) Force equal to

- (i) mass \times velocity (ii) mass \times acc. (iii) acc. \times velocity (iv) mass \times distance

(c) The SI Unit of relative density

- (i) kgm^{-3} (ii) gm^{-3} (iii) kgm (iv) $\text{g}^{-1} \text{ km}$

CHEMISTRY

Q5. List points of difference between the homogeneous and heterogeneous mixture. (5)

Or

Define Solution with examples? Write its properties.

Q6. Briefly explain: (3)
a) Latent heat of fusion b) latent heat of vaporization

Q7. Why do we see water droplets on the outer surface of glass containing ice cold water? (2)

Q8. **Multiple Choice Questions:** (3)

a) The mass per unit volume of a substance

(i) Fluidity (ii) Density (iii) Saturation (iv) Elasticity

b) Tyndall effect is observed in

(i) solution (ii) solvent (iii) suspension (iv) colloids

(c) Brass is an alloy of

(i) tin and copper (ii) zinc and copper (iii) tin and zinc (iv) zinc and lead.

BIOLOGY

Q9. Draw and explain the structure of Animal Cell. (5)

Or

Draw and explain Nervous Tissue.

Q10. Distinguish between Prokaryotic and Eukaryotic Cell. (3)

Q11. Why the blood is called Connective tissue? (2)

Q12. **Multiple Choice Questions:** (4)

a) Who discovered cell?

(i) Robert Hook (ii) Robert Watson (iii) John Dewey (iv) Neil Bohr

b) The Cell with single chromosome

(i) Prokaryotic Cell (ii) Eukaryotic Cell (iii) None of the above (iv) Both (i) and (ii)



c) Epidermis is

(i) Outermost layer of cell

(iii) Outer layer of Nucleus

(ii) Innermost layer of cell

(iv) Inner layer of nucleus

d) ----- allow water and mineral conduction

(i) Phloem

(ii) Xylem

(iii) Both (i) & (ii)

(iv) none of the these



MODEL PAPER TERM - II

CLASS: 9TH

SUBJECT: SCIENCE

TIME: 2 HRS

MAX. MARKS: 40

PHYSICS

Q1. Define the Universal law of Gravitation and state its importance? (5)

Or

An object is thrown vertically upwards and rises to height of 10m. Calculate

(i) the velocity with which the object was thrown upwards and

(ii) the time taken by the object to reach the highest point.

Q2. Explain how sound is produced by your school bell? (3)

Q3. What work is to be done to increase the velocity of a car from 30 kmh^{-1} to 60 kmh^{-1} if the mass of the car is 1500kg? (2)

Q4. Multiple Choice (3)

(a) The SI Unit of work done is

(i) Joule (ii) Newton (iii) Dyne (iv) Tesla

b) Rate of doing work is

(i) Power (ii) Energy (iii) Kinetic energy (iv) Pressure

(c) The speed of sound in a medium depends on

(i) temperature (ii) pressure (iii) Both (i) and (ii) (iv) velocity

CHEMISTRY

Q5. Explain Rutherford's Model of an atom and write its drawbacks? (5)

Or

Compare the properties of electrons, protons and neutrons.



Q6. Define the following terms with examples.

(3)

a) Isotopes

b) Isobars

Q7. Write down the formula of

(2)

(i) Aluminium oxide

(ii) Magnesium oxide

Q8. Multiple Choice Questions:

(3)

(a) Co is the symbol of

(i) Carbon

(ii) Cobalt

(iii) Magnesium

(iv) Cadmium

(b) The Avogadro's number is

(i) 6.022×10^{23}

(ii) 6.022×10^{32}

(iii) 6.024×10^{22}

(iv) 6.024×10^{46}

(c) The valency of chlorine is

(i) Zero

(ii) One

(iii) Two

(iv) Four

BIOLOGY

Q9. What are the desirable agronomic characteristics for crop improvement?

(5)

Or

What is genetic manipulation? How is it useful in agricultural practices?

Q10. Write some of the symptoms of Drug Addiction?

(3)

Q11. Write the various problems suffered by adolescents?

(2)

Q12. Multiple Choice Questions:

(4)

a) Fertilizers supply

(i) Nitrogen, Potassium

(ii) Aluminium

(iii) Iron

(iv) Calcium

b) _____ compete for food, space and light

(i) pesticides

(ii) weeds

(iii) microbes

(iv) fertilizers



c) AIDS stands for

- (i) Acquired Immune Deficiency Syndrome
- (i) Acquired Immunity Deficiency Syndrome
- (iii) All Immune Deficit Syndrome
- (iv) All Immunity Deficit Syndrome

d) The vital organ which is affected by tobacco is

- (i) Lungs
- (ii) Stomach
- (iii) Kidneys
- (iv) Liver

