

FIRST TERM EXAMINATION 2025-2026

CLASS : VII

SUBJECT : PHYSICS

READING TIME : 15 MINUTES

FULL MARKS : 80

WRITING TIME : 2 HOURS

SECTION -A 40 MARKS (Answer all questions)

Question- 1

Choose the correct answer : (15 × 1 = 15)

i) Which of the following relations is correct?

- a) $\angle i = \angle r$ b) $\angle i > \angle r$ c) $\angle r > \angle i$ d) $\angle i \geq \angle r$

ii) In a moving fan, electrical energy changes into _____ energy.

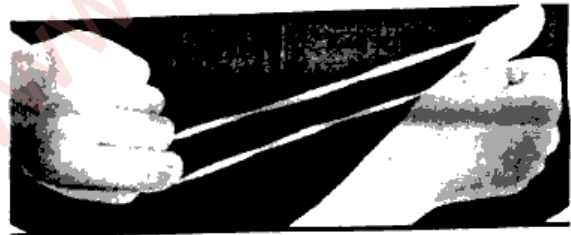
- a) Mechanical. b) Magnetic. c) Light. d) Sound

iii) The density of gold is 19.3 g/cm^3 . What is its density in kg/m^3 ?

- a) 1930. b) 19300 c) 193000 d) 0.0193

iv) Which form of energy is stored in the rubber band in the following figure?

- a) Kinetic. b) Potential.
c) Chemical. d) Electrical



v) When a ray of light falls normally in a reflecting surface, the angle of incidence is

- a) 90° b) 100° c) 45° d) 0°

vi) The primary colours are

- a) Red, Blue and Yellow b) Magenta, Yellow and Cyan
c) Red, Blue and Cyan d) Blue, Green and Red

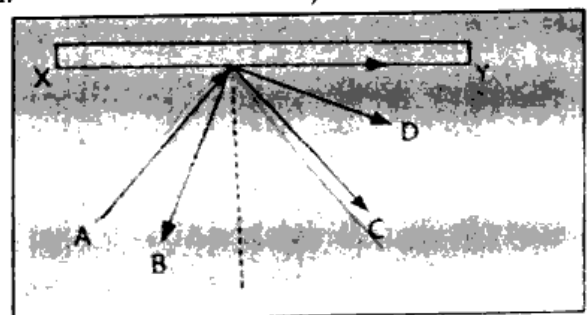
vii) The speed of very fast objects is measured in :

- a) m/s. b) cm/h. c) km/h. d) km/s

viii) An incident ray A strikes a plane mirror as shown in the given ray diagram.

Identify the reflected ray.

- a) B. b) C. c) D. d) Y



ix) A ray of light after reflection from the mirror is known as :

- a) Reflected ray b) Normal c) Incident ray d) Refracted ray

x) Assertion (A) : To calculate the speed of a moving object, we first need the distance travelled by it.

Reason (R) : The time taken by the moving object per unit distance travelled by it is called its speed.

- a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true and R is not the correct explanation of the assertion.
c) A is true and R is false d) A is false and R is true

xi) The motion of smoke particles is an example of _____

- a) Vibratory motion b) Random motion
c) Translatory motion d) Oscillatory motion

xii) Assertion(A) : Work done by the man in pushing a wall is zero.

Reason (R) : Work is said to be done when some displacement is produced by applying force.

- a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true and R is not the correct explanation of the assertion.
c) A is true and R is false d) A is false and R is true

xiii) The angle of incidence on a plane mirror is 30° . The angle of reflection is :

- a) 30° b) 0° c) 45° d) 0°

xiv) Which of the following does not contain chemical energy ?

- a) Battery. b) Candle c) Coal. d) Falling ball

xv) The side of a cubical box is 5cm. Which of the following is its correct volume?

- a) 10cm^3 b) 25cm^3 c) 125cm^3 d) 50cm^3 .

Question 2

Fill in the blanks :

(5 × 1 = 5)

- i) Magenta, cyan and yellow are _____ colours. (primary/secondary/tertiary)
ii) In a moving fan, electrical energy changes into _____ energy. (mechanical/ light/nuclear)
iii) The method by which we can determine the volume of an irregular solid is _____ method.
(Lateral Inversion/ Reflection /Displacement)
iv) Blue + _____ = Cyan . (Red/Green/ Magenta)
v) A string of a sitar on being plucked describes _____ motion. (Oscillatory/Vibratory/Rotatory)

Question – 3

Correct the incorrect statements by changing the underlined word only : (5 × 1 = 5)

- i) S.I unit of energy is calorie.
ii) The energy conversion in an electric bell is the form of electrical energy to chemical energy.

- iii) Convex meniscus is formed when water is poured into a graduated cylinder
- iv) The area per unit volume of a substance is called its density.
- v) As rain falls, potential energy is converted to heat energy.

Question - 4:

i) State whether light slows down or speeds up in the following cases: (5 × 1 = 5)

- a) Light going from air to glass b) Light going from glass to air
- c) Light going from water to air. d) Light going from water to glass
- e) Light going from glass to water

ii) Give one or two words for :

- a) S.I unit of weight b) Total space occupied by an object
- c) Energy possessed by a moving body d) A primary colour of light
- e) A unit used to measure volume of liquids.

iii) Observe the diagram and answer the questions based on it.

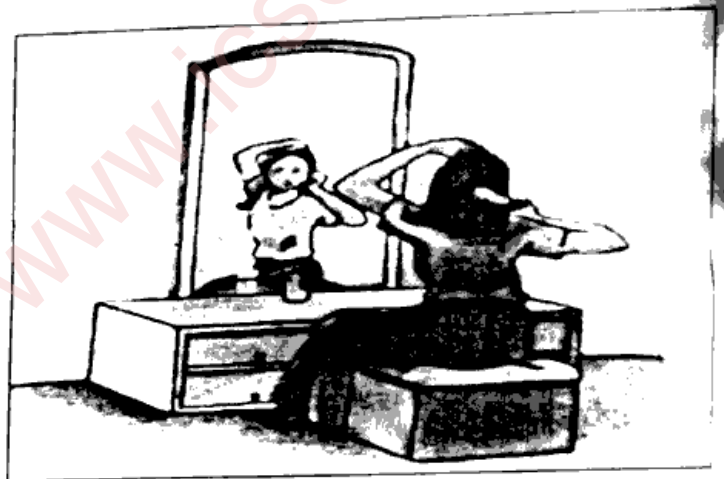
a) A girl raised her left hand, but in the image, it appeared right. What is the special name given to this phenomenon? Define it.

b) If the girl is at a distance of 3 m from the mirror, what is the distance of her image from the mirror ?

c) What is the total distance between the girl and her image ?

d) Is this image real or virtual ?

(2+ 1+1+1)



SECTION - B - 40 MARKS (Attempt any four questions)

Question - 5

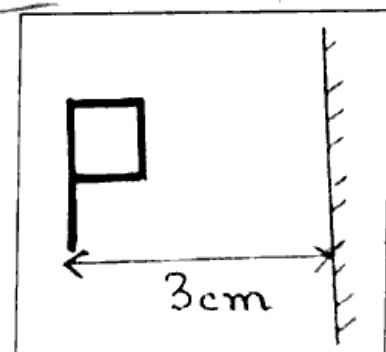
i) Name the things used to :

(1+1+1)

- a) To measure mass of an object b) To measure weight of an object
- c) To measure the area of an irregular object

ii) a) A circular field has radius of 7cm. Find its area in cm². (2)

b) Draw the image of the letter P as shown in the given diagram.(2)



m) a) Varun finds a heavy stone on his way and pushes hard at it. After 5 minutes, he feels dead tired. How much work has he done? Why? (1+1)

b) State the Law of Conservation of Energy. (1)

Question - 6

i) State the energy conversion in : (1+1+1+1)

a) Solar cell b) Television c) Electric motor d) Burning of cooking gas

ii) Calculate the volume of wood of mass 200kg, given the density of wood is 800kg/m^3 . (3)

iii) A bucket of water is kept on the first floor of your house and another identical bucket with same quantity of water is kept on the second floor.

Which of the two has greater potential energy? Give reason. (2)

iv) Define nuclear energy. (1)

Question - 7

i) The mass of a person is 50 kg. What is the weight of the person if $g = 10\text{m/s}^2$? (2)

ii) A book is 25 cm long, 15 cm wide and 2cm high. What is the volume of the book? (2)

iii) A train travels a distance of 300 km with an average speed of 60km/h. How much time does it take to cover the distance? (3)

iv) State the colour of a green shirt in a room illuminated by red light only. Give reason for your answer. (1)

v) The speed of light in vacuum is _____ m/s. (1)

Question - 8

i) a) Draw the reflected ray.

b) What is the angle of reflection? State the law used.

c) Define the ray AO. (1+2+1)

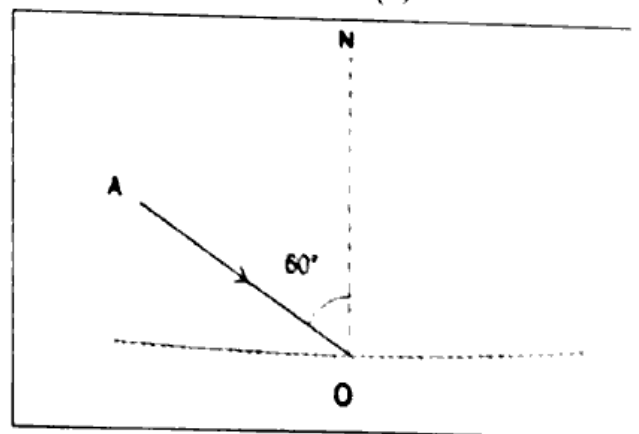
ii) Differentiate between :

a) Oscillations and vibrations

b) Rotatory and Circular motion (1+1)

iii) A car travels with a speed of 24 m/s, while a scooter travels with a speed of 36km/h. Which one of the two travels faster? Show the working. (2)

iv) a) Red + Blue = _____ b) _____ + Red = Yellow (1+1)

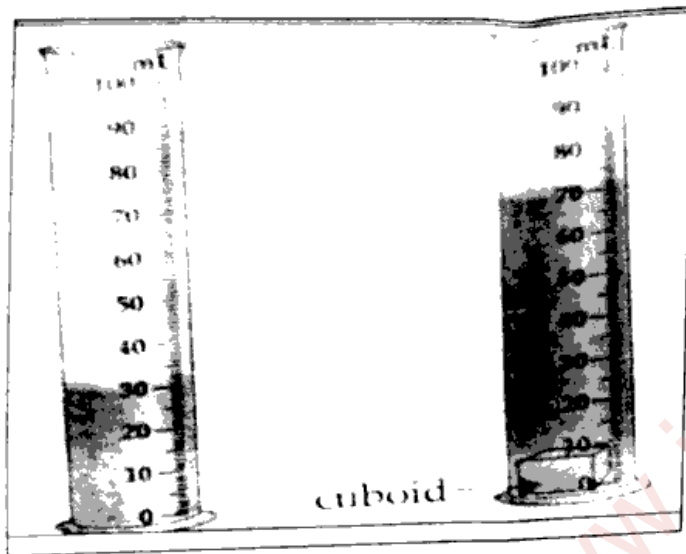


Question - 9

i) Write three characteristics of an image formed by a plane mirror. (3)

ii) a) Level of water in a measuring cylinder before and after a cuboid is placed into water is shown in the figure given below. The length and breadth of cuboid are 5 cm and 4cm respectively.

Calculate the volume and height of the cuboid.



b) Is this cuboid a regular or irregular object ?

(5+1)

iii) _____ image cannot be obtained on a screen.

(1)