STEM SCHOOL
VIDYA NAGAR - GUNTUR
Affiliated to ICSE, New Delhi | Affiliation No : AP116

QUARTERLY EXAMINATION – 2024-2025
SUBJECT: PHYSICS
GRADE: VI

DATE:24-09-2024 **TIME: $2\frac{1}{2}$ HOURS**

NAME OF THE STUDENT & SEC: _____ **Max. MARKS: 80**

- *This question paper contains two sections which is 80Marks.*
- *SECTION A contains 40Marks (Attempt all the questions from this section)*
  I) Choose the correct answers to the questions from the given options: [15M]
  (II) Answer for all the following questions: [25M]
- *SECTION B contains 40 Marks (Attempt any four questions from this section)*

SECTION A- 40 Marks
(Attempt all the questions from this section)

Question 1:

Choose the correct answers to the questions from the given options: **[15M]**

1. Symbol for a unit named after a scientist is always written with _____.
   a) small letters b) bold letters c) capital letters d) none of the above
2. The lengths still shorter than centimetre are expressed in
   a) metre b) millimetre c) kilometre d) hectometre
3. One gram is the _____ part of a kilogram.
   a) one-hundred b) one- tenth c) one-fifth d) one- thousandth
4. In F.P.S. system the unit of mass is
   a) gram b) pound c) kilogram d) milligram
5. Normal temperature of a human body is_____
   a) 37°C b) 40°C c) 38°C d) 45°C
6. The desire for new _____ will never end.
   a) discoveries b) inventions c) gadgets d) all of the above
7. _____ is a branch of science that deals with the study of animals.
   a) biology b) zoology c) chemistry d) botany
8. The matter composed of a very large number of tiny particles known as
   a) electrons b) atoms c) particles d) protons
9. Which of the following is a characteristic of a solid?
   a) Fixed shape and volume b) Can be easily compressed
   c) Fills the container it is in d) Has no definite shape
10. The change from liquid to gas at a constant temperature is called_____.
    a) Boiling b) Freezing c) Condensation d) melting

11. Which of the following is NOT a unit of length?

a) Metre b) Kilometre c) Litre d) Centimetre

12. A stopwatch is most suitable for measuring:

a) Volume b) Distance c) Time intervals d) Temperature

13. How many seconds are there in an hour?

a) 60 b) 600 c) 3600 d) 7200

14. The Zero mark in Celsius thermometer is the melting point of _____

a) ice b) water c) mercury d) none of the above

15. The area of a rectangle is calculated using the formula:

a) ½ l×h b) l×b×h c) l×h d) l×b

Question 2:

Answer the following questions:

(i) **Complete the following:** **[6M]**

a) One degree on Celsius scale is equal to _____ (one degree, two degree) on Kelvin scale.

b) The _____ (square metre, square centimetre) is a convenient unit to express the area of a room.

c) Physics is a science of _____ (measurement, advice)

d) °C is the unit of _____ (temperature, time)

e) The molecules in a liquid are _____ (less closely, tightly) packed.

f) A molecule or a cluster of several molecules is called a _____ (nano particles, particles)

(ii) What is measurement. How is a measurement expressed? **[2M]**

(iii) Mention two characteristics of a unit.? **[2M]**

Question 3:

Answer the following questions:

a) Name four basic fundamental physical quantities. **[2M]**

b) Write one multiple and submultiple unit of length. **[2M]**

c) What do you mean by inter molecular space. **[2M]**

d) List two properties of gases. **[2M]**

e) Define melting. **[2M]**

f) Name two devices used for measuring the length of an object. **[2M]**

g) Name the instrument used for measuring the temperature of a person. Draw its neat labelled diagram. **[3M]**

SECTION B-40 Marks

*(Attempt **any Four** questions from this section)*

Question 4:

1. Convert the following quantities: **[3M]**

   i. 1 foot=_____inch

   ii. 4 m=_____cm

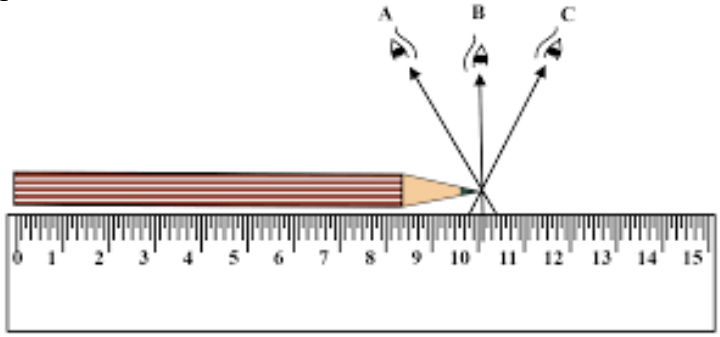
   iii. 5 km=_____m

2. Define surface area and state its S.I. unit. **[3M]**

3. Write names and symbols of S.I. units of four basic physical quantities. **[4M]**

Question 5:

1. Name the most commonly used device to measure the mass of an object and draw a neat labelled diagram of it. **[3M]**
2. Expand the following: **[3M]**
   (a) C.G.S.
   (b) M.K.S.
   (c) F.P.S.
3. The diagram below shows the pencil placed along a metre ruler. The length of the stick is measured keeping the eye at position A, B and C. **[4M]**



   (a) Write the length of the pencil as observed, for each position of the eye. Are they all same.
   (b) Which is the correct position of the eye? Write the length of the pencil.

Question 6:

1. Describe the molecular model of a liquid. How does it explain that a liquid has no definite shape, but a definite volume. **[3M]**
2. How do the solids, liquids and gases differ in their following properties. **[3M]**
   (a) Shape
   (b) expansion on heating
   (c) volume
3. Name the three parts of electronic balance and their functions. **[4M]**

Question 7:

1. Write any two multiple and sub multiple units of mass and how they are related to S.I. unit of mass. **[3M]**
2. Express in seconds. **[3M]**
   (i) 3 min 20 seconds
   (ii) Day
3. Classify the following substances as solid liquid and gases: **[4M]**
   Milk, helium, gold, wood, Dettol, oxygen, oil, sugar

Question 8:

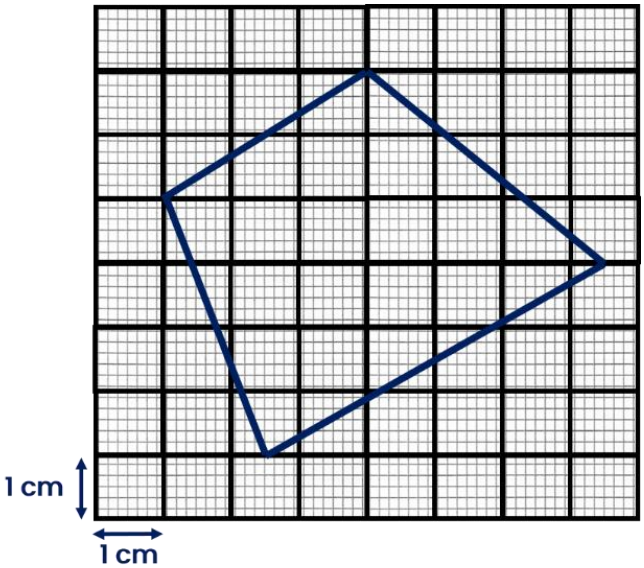
1. Write the formulas for the following regular shapes. **[3M]**

   (a) Area of a square

   (b) Area of triangle

   (c)Area of a circular lamina.

2. Define temperature. State S.I. and other units of temperature. **[3M]**
3. Find the area of an irregular surface from the graph given below. [Area of each square is 1cm²]. **[4M]**



Question 9:

1. (a) How are the units km² and hectare related to S.I unit(m²) of area? **[3M]**

   (b) Write the temperature of melting ice a boiling water

2. What is time. Mention the small and bigger units of time. **[3M]**
3. List four characteristics of particles of matter. **[4M]**

ALL THE BEST

