

I Fill in the blanks:

[10]

1. Atoms combine to form _____
2. _____ have maximum inter molecular space.
3. Every measurement consists of two parts, a numerical value and a _____
4. Area of regular shapes can be determined by using a _____
5. The hole on the standard weight is filled by _____
6. One gram = _____ milli grams.
7. _____ are used to record the time interval in laboratories and on sports field.
8. A slight bent or kink in a clinical thermometer is called _____
9. _____ in Jaipur and Delhi are eg: of sundials.
10. The normal body temperature of a person is _____

II Name the following:

[8]

1. The instrument used to measure mass accurately
2. The standard unit to measure temperature
3. A liquid commonly used in thermometers
4. The interval between two events
5. The SI unit to measure volume
6. The space between the particles of matter
7. The instrument used to measure length by tailors and carpenters
8. The state of matter which can be compressed easily

III Write TRUE or FALSE and rewrite the false statement correctly.

[10]

1. Oxygen and nitrogen are eg: of gases.
2. The greater the inter molecular space, the more will be the inter molecular force of attraction.
3. One kilometre = 1000 metre
4. A beam balance can be used to measure the mass of a soap cake.
5. The SI unit of area is square metre.
6. The full form of NPL is National Physical Laboratory.
7. One hour is equal to 86400 second
8. Mercury in the capillary tube appears as a shiny thread.
9. A laboratory thermometer is marked from 0°C to 100°C.
10. A clinical thermometer measures the temperature of boiling water.

IV Match the following:

[5]

A	B
1. Solids	degree Celsius
2. Matter	2.54 cm
3. Temperature	fixed shape
4. One inch	mass
5. Quintal	occupies space

V Define the following:

[7]

1. Mean solar day
2. Temperature
3. Time
4. Area
5. Length
6. Inter molecular force of attraction
7. Unit

VI Differentiate between the following (Any three points):

[6]

1. Liquids and gases
2. Laboratory thermometer and clinical thermometer

VII Convert the following.

[6]

1. 15m to cm
2. 9kg to g
3. 2500m to km
4. 5minutes to seconds
5. 7:50 p.m to 24 hour clock
6. 0930 h to 12 hour clock

VIII Answer the following

[12]

1. What is parallax error? How can it be avoided?
2. (i) State the unit of mass in SI system.
(ii) Name any one unit used to measure the mass of lighter bodies.
3. How many hours are there in 10 days and 5 hours?
4. How do you come to know that a person is suffering from fever?
5. What is the purpose of constriction in a clinical thermometer?
6. State the standard unit of time. How is it related to one mean solar say?

IX Write the answers of the following.

1. What are the precautions needed to be taken while measuring the length of a wooden block using a meter scale? [3]
2. Find the thickness of a 2-rupee coin if a stack of fifteen coins placed one upon the other has height 6cm. [3]
3. Show the inter molecular space between solids, liquids and gases diagrammatically. [3]
4. Write a short note on beam balance. [3]
5. Find the area of the object given in the following diagram. Write the necessary steps to find the area. [4]

