# MENTORS EDUSERV TALENT REWARD EXAM (METRE)
# SAMPLE TEST PAPER

**[For Students presently in Class 5 going to Class 6 in 2022]**

**Time : 2 hours** | **Maximum Marks: 225**

## INSTRUCTIONS

**[A]   General**

1. This Question paper contains **FIVE** Parts, **A to E** (Physics, Chemistry, Mathematics, Biology & Mental Ability).

2. This Question Paper contains **16 pages** including cover page.

3. This question paper contains total **75 questions** (**15** questions each in Physics, Chemistry, Mathematics, Biology and Mental Ability).

4. The Question Paper has blank spaces at the bottom of each page for rough work. No additional sheets will be provided for rough work.

5. Blank papers, clip boards, log tables, slide rule, calculators, cellular phones, pagers and electronic gadgets, in any form, are **NOT** allowed.

6. The **OMR** (Optical Mark Recognition) sheet shall be provided separately.

**[B]   Answering on the OMR**

7. In all the parts, each question will have **4 choices** out of which **only one choice is correct**.

8. Darken the bubble with **Ball Pen (Blue or Black) ONLY**.

**[C]   Filling OMR**

9. On the **OMR sheet**, fill all the details properly and completely, otherwise your OMR will not be checked.

10. Do not write anything or tamper the barcode in the registration no. box.

**SEAL**

**[D]   Marking Scheme:**

11. For each question you will be awarded **3 marks** if you darken the bubble corresponding to the correct answer **ONLY** and **zero (0) marks** if no bubble is darkened. In all other cases, **minus one (–1) mark** will be awarded.

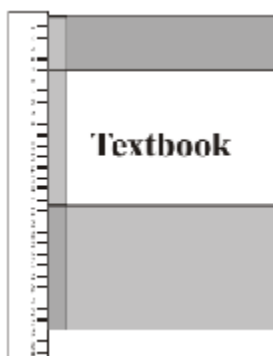**Name :**.......................................................................................................................

**Registration No.:**
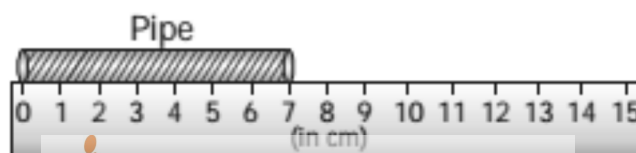
# PART-A : PHYSICS

**[Q.1]** A student wants to find out the length of a textbook.



Which unit should the student use to record the length of the textbook?

[A] centimeters      [B] grams      [C] gallons      [D] °C

**[Q.2]** In the given figure the length of the pipe is



[A] 9 cm      [B] 7 cm      [C] 6 cm      [D] 5 cm

**[Q.3]** Earth revolves around the sun and rotates on its own axis.



Study each statement below.

A. Earth takes 365 and 1/4 days to rotate on its own axis.

B. Earth takes 24 hours to rotate once around its own axis.

C. The rotation of Earth on its own axis causes day and night.

D. The revolution and rotation of Earth takes place at the same time.
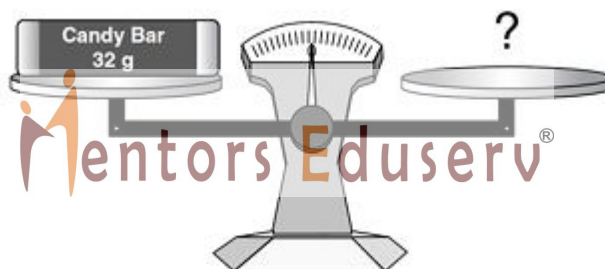
Select the correct combination.

[A] A ; B ; C ; D      [B] C ; D      [C] B ; C ; D      [D] B ; C

**[Q.4]** When tectonic plates collide, molten rock from beneath Earth's crust is sometimes forced up through the surface. When this occurs, it is called



[A] a mountain [B] an earthquake [C] a rift [D] a volcano

**[Q.5]** Which group of weights has a mass of 32 grams?



[A] 5g 1g [B] 10g 10g 5g

[C] 10g 10g 5g 1g 1g [D] 10g 10g 5g 5g 1g 1g

**[Q.6]** Earthquake vibrations are detected, measured and recorded by an instrument called

[A] sonargraph

[B] seismograph

[C] richter scale

[D] magnetometer

**[Q.7]**     Which of these diagrams shows a lever being used to do work?

[A]

[B]

[C]

[D]
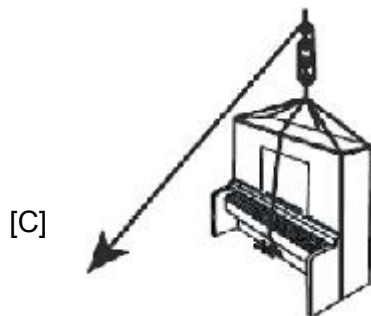
**[Q.8]**     Which of the given figures best demonstrates a magnetic force ?
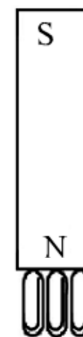
Fig.1            Fig.2            Fig.3

[A]   Fig. 1                                      [B]  Fig. 2
[C]   Fig. 3                                      [D]  Both Fig.1 and Fig.2

**[Q.9]** Which of these seesaws is most likely to tip to the left?



[A]

[B]

[C]

[D]
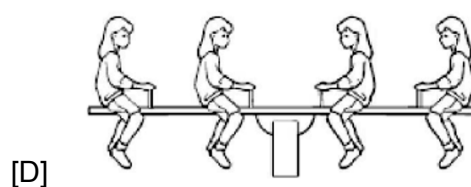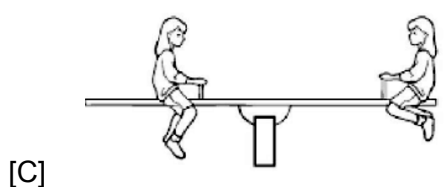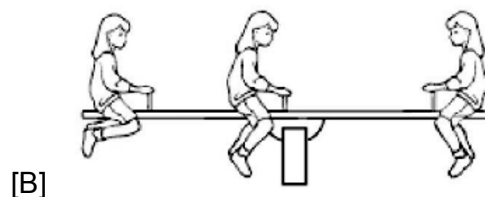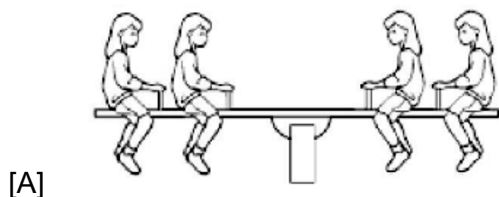
**[Q.10]** According to the given figure of planets revolving around the sun, which letter represents the planet where you live ?
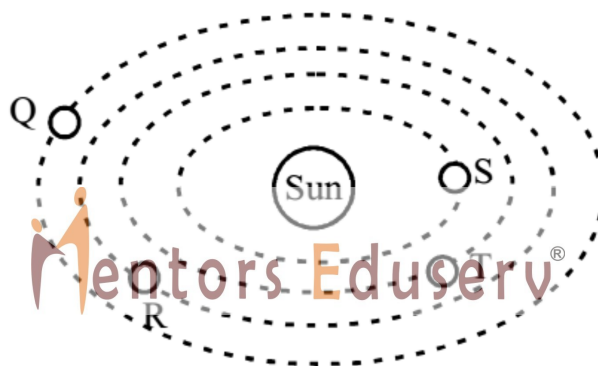


[A]   Q          [B]   R          [C]   S          [D]   T

**[Q.11]** A person pushes a box as shown. What is the push most likely to change?
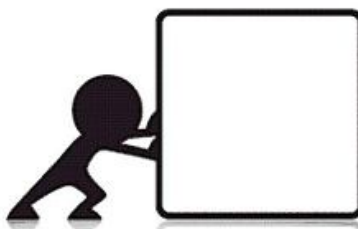


[A]   The size of the box             [B]   The mass of the box

[C]   The color of the box           [D]   The color of the box

**[Q.12]** Which of these is the best tool to use when measuring the water depth at the edge of a pond?

[A] 
Net

[B] 
Meter stick

[C] 
Beaker

[D] 
Binoculars
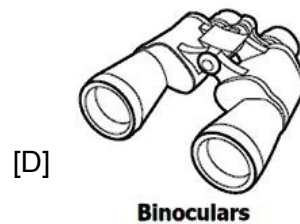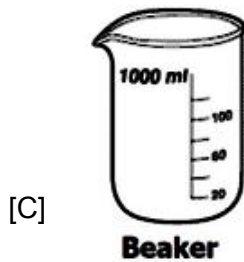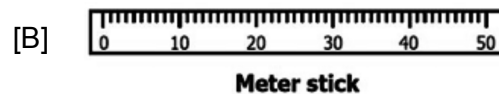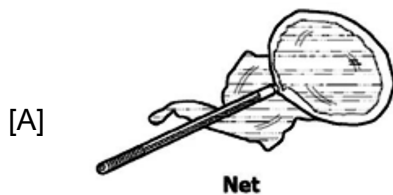
**[Q.13]** A bucket of ice was left outside to melt on a warm day. The picture given here shows the time when the experiment was started and the time when the ice finally melted. At what time did the ice melt?


Start          Stop
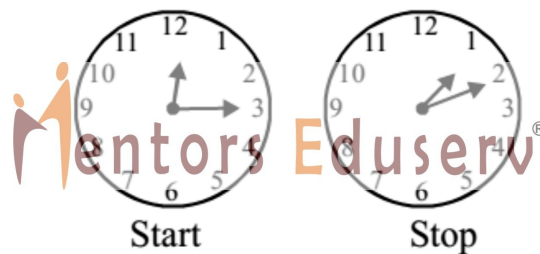
[A]  12:15 pm          [B]  2:10 pm          [C]  1:02 pm          [D] 1:10 pm

**[Q.14]** Major part of earth's crust is covered with

[A]  Trees          [B]  Mountains          [C]  Water          [D]  Chocolate

**[Q.15]** Which of these could have caused the field to look like the picture?



[A]  A flood          [B]  A drought          [C]  A snowstorm  [D]  A tornado

# PART-B : CHEMISTRY

**[Q.16]**   Water present in container 'P' is transferred to container 'Q' as shown in the figure. Which of the following will change for water because of the transfer?
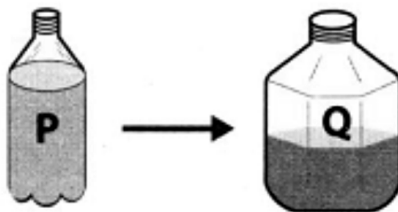


[A]   Volume          [B]  Mass              [C]  Temperature   [D]  Shape

**[Q.17]**   Use the data table below to answer the question.

| Observations of Unknown Object |
| --- |
| is shiny |
| conducts electricity |
| is not magnetic |

According to the evidence in the data table, which material most likely makes up this object?

[A]   Iron              [B]  Polished wood    [C]  Copper          [D]  Plastic wrap

**[Q.18]**   Which human activity/activities is/are the main cause(s) of water pollution?
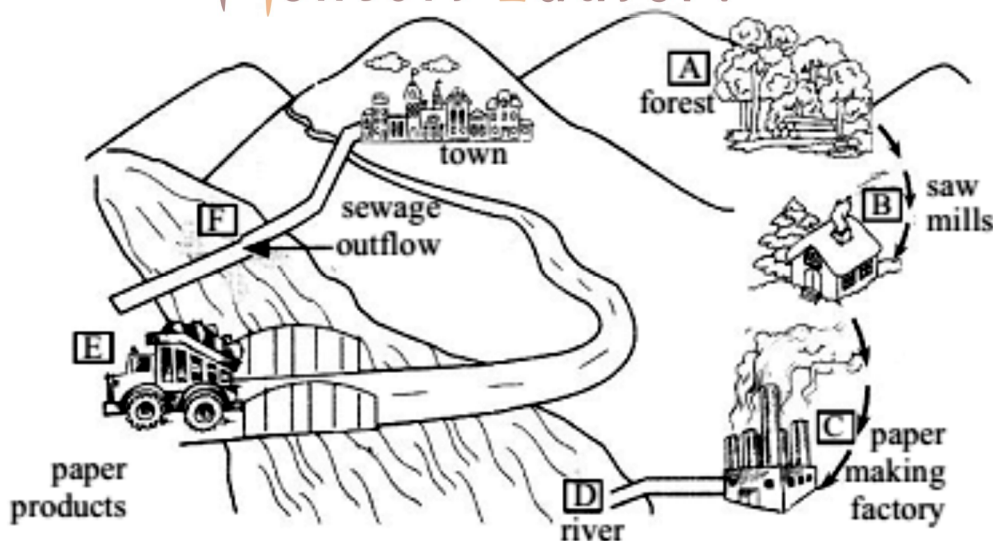


[A]   A and B only                          [B]  B and D only

[C]   Both C and F                          [D]   A and F only

**[Q.19]** Study the given flowchart carefully and select the correct option regarding it.
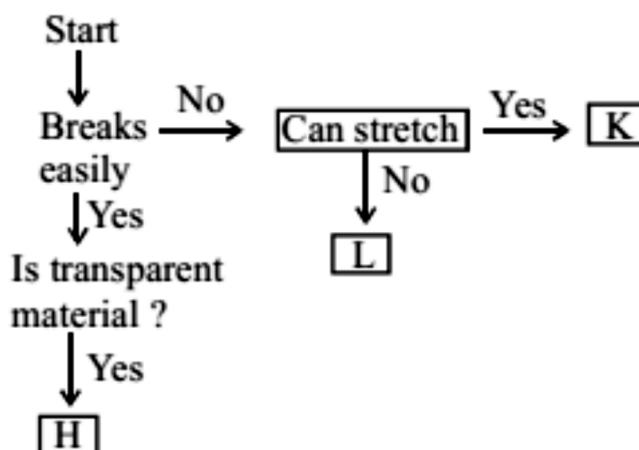


[A] A wooden chair can be placed at box K [B] A clay pot can be placed at box H

[C] A glass plate can be placed at box H [D] A paper can be placed at box K

**[Q.20]** Ground water

[A] Helps in germination of seeds [B] Maintains the moisture of the soil

[C] Keeps green the deep rooted trees [D] All of the above

**[Q.21]** Wastes that can be broken down by microbes in the soil is

[A] Biodegradable wastes [B] Non-biodegradable wastes

[C] E-wastes [D] None of these

**[Q.22]** Which list includes only examples of matter that can take the shape of a container?

[A] Oil, air, and rock [B] Water, air, and milk

[C] Pen, ice, and wood [D] Nail, stick, and paper

**[Q.23]** The state of matter which has definite volume and definite shape

[A] Solid [B] Liquid [C] Gas [D] None of these

**[Q.24]** Which of the following is generally used as a drinking water source?

[A] Sea water [B] Glaciers [C] Ground water [D] All of these

**[Q.25]** A teacher opens a can of food in the front of a classroom. Soon, all of the students in the classroom can smell the food. Which statement identifies a property of a gas that allows all of the students to smell the food?

[A] A gas has no mass.

[B] A gas has a large mass.

[C] A gas takes the shape of its container.

[D] A gas keeps its shape when placed in a container.

**[Q.26]** Which one of the following is correct statement ?

[A]    All matter is made up of very small particles.

[B]    In liquid, particles are tightly packed as in solids.

[C]    Heating a substance makes its particles slow down.

[D]    When water is cooled, its particles start moving fast.

**[Q.27]** The picture below shows water droplets on the outside of a glass that contains water.

Which action would most likely cause water droplets on the outside of the glass?



[A]    A glass containing hot water is placed in a cold room.

[B]    A glass containing cold water is placed in a cold room.

[C]    A glass containing hot water is placed in a warm room.

[D]    A glass containing cold water is placed in a warm room.

**[Q.28]** The given figure shows a switch board. Which of the following materials it be made of ?



[A]    Metal & wood                    [B]    Metal & plastic

[C]    Glass & metal                    [D]    Rubber & plastic

**[Q.29]** Study the given flow chart carefully and select the correct option regarding it
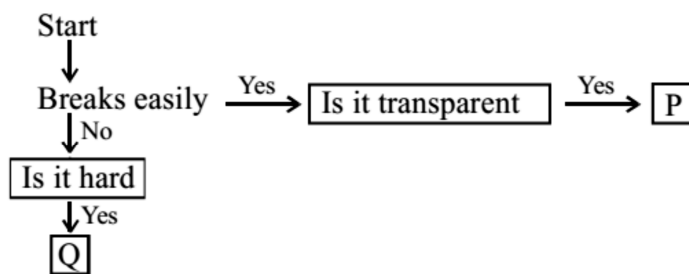


|     | **P**      | **Q**   |
|-----|------------|---------|
| [A] | Hydrogen   | Glass   |
| [B] | Rubber     | Glass   |
| [C] | Clay       | Cloth   |
| [D] | Glass      | Metal   |

**[Q.30]** Read the following statements.

(i) I am present in air.

(ii) I enter your lungs when you breathe in.

(iii) Your body needs me to produce energy.

Which of the following gas is being described by the above statements?

[A] Carbon dioxide    [B] Nitrogen      [C] Hydrogen      [D] Oxygen

# PART-C : MATHEMATICS

**[Q.31]** Find the perimeter of the following figure.
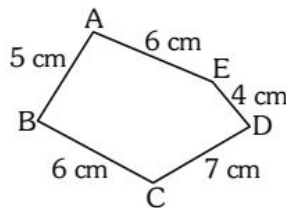
[A] 23 cm      [B] 25 cm      [C] 28 cm      [D] None of these

**[Q.32]** Which point is interior to the angle in the following figure?
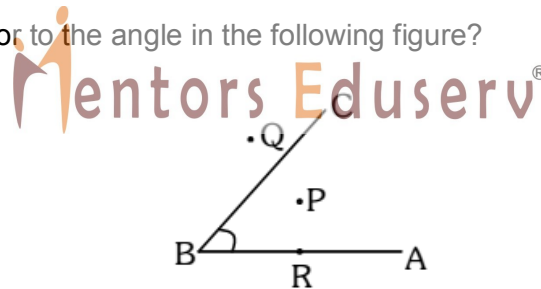
[A] P      [B] Q      [C] R      [D] Both P & Q

**[Q.33]** Find the perimeter of the following figure ABCD.
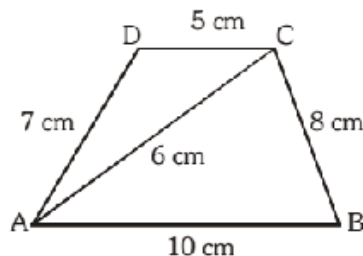
[A] 30 cm      [B] 36 cm      [C] 42 cm      [D] 24 cm

**[Q.34]** Which has greater area ?
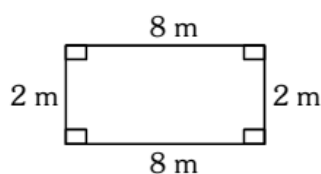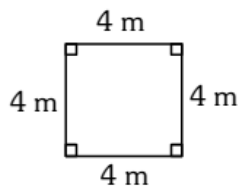


(i) Rectangle    (ii) Square

[A]  (i)           [B]  (ii)           [C]  Both are equal     [D]      None of these

**[Q.35]**  In a right angled triangle, one angle is 48° . Then find the remaining angle.

[A]  45°                            [B]  42°

[C]  90°                            [D]  Can't be determined

**[Q.36]** The smallest counting number is

[A]  0              [B]  1              [C]  2              [D]  3

**[Q.37]** Number Y is a multiple of 9. It is between 30 and 50. It is also a factor of 72. What is number Y?

[A]  32             [B]  36             [C]  38             [D]  45

**[Q.38]** Ten million = _____

[A]  10 crore        [B]  1 crore        [C]  100 crore       [D]  None of these

**[Q.39]** Subtract 760 cm from 896 cm.

[A]  0.136 m         [B]  136 m          [C]  13.6 m          [D]  1.36 m

**[Q.40]** Write first five multiples of 16.

[A]  16, 32, 48, 58, 68                [B]  16, 32, 48, 64, 80

[C]  32, 48, 64, 80, 96                [D]  16, 32, 45, 65, 85

**[Q.41]** 1 Kg is _____ times of miligram.

[A]  1000000        [B]  100000         [C]  10000          [D]  1000

**[Q.42]** Which of the following number has more than 5 factors?

[A]  15             [B]  25             [C]  16             [D]  60

**[Q.43]** The number of the prime numbers less than 50 is

[A]  25             [B]  14             [C]  16             [D]  15

**[Q.44]** Find the area of a rectangle whose sides measure 0.02 m and 0.06 m

[A]  10 cm$^2$       [B]  24 cm$^2$       [C]  12 cm$^2$       [D]  1.2 cm$^2$

**[Q.45]** The perimeter of a rectangle is 60 cm. If its length is 20 cm, find its breadth.

[A]  5 cm            [B]  10 cm           [C]  15 cm           [D]  20 cm

# PART-D : BIOLOGY

**[Q.46]** The main sources of vitamins and minerals are

[A] Pulses, meat and egg

[B] Oil, butter and ghee

[C] Fruits and green vegetables

[D] Potato, maize, wheat and rice

**[Q.47]** A person is suffering from Anaemia, the food recommended for recovery of this disorder are

[A] Iodised salt & sea food

[B] Sea food and milk

[C] Butter, fish & meat

[D] Apple & Spinach

**[Q.48]** Which of the following disease is non communicable?

(i) Cholera    (ii) Typhoid    (iii) Diabetes    (iv) Chicken pox

[A] (i), (ii) and (iii)    [B] (iii) only    [C] (i) & (ii) only    [D] All of these

**[Q.49]** Which of these best defines communicable diseases?

[A] They can be cured.

[B] They are caused by bacteria.

[C] They are spread to others.

[D] They can spread only in winter.

**[Q.50]** For immediate energy production in cells one should take

[A] Glucose    [B] Proteins    [C] Vitamin C    [D] Minerals

**[Q.51]** Which of the following statement is not correct ?

[A] Pupa are larva of frog.

[B] Tadpole is larva of frog which has tail.

[C] Tadpole undergo process of meta-morphosis

[D] All of the above

**[Q.52]** Some plants attract, capture, kill and digest insects, such plants are known as insectivorous plants.Which of the following is a insectivorous plant?
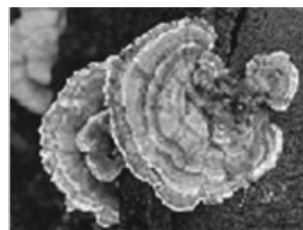
[A]

Pitcher plant

[B]

Mushroom
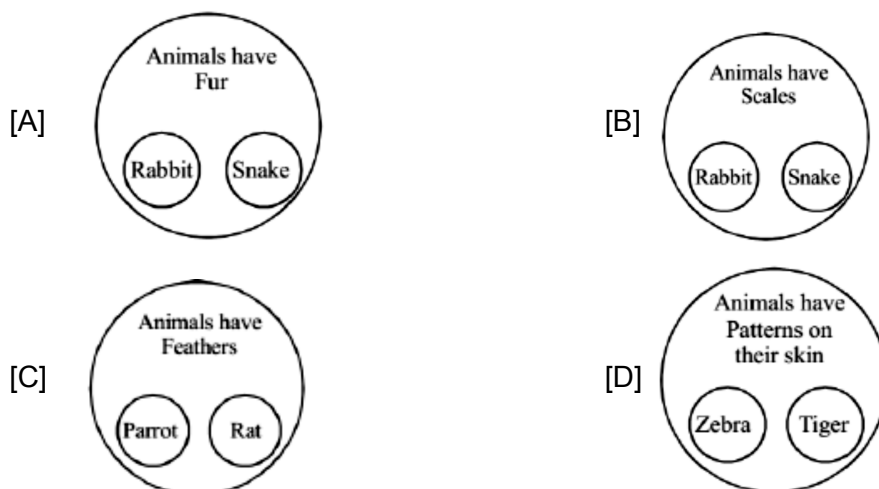
[C]

Hydrilla

[D]

Bracket fungi

**[Q.53]** Disease can be

[A] inherited

[B] caused by toxic materials

[C] the result of poor nutrition

[D] a result of all of the above

**[Q.54]** This is an air borne disease

[A] Scabies  [B] Typhoid  [C] Measles  [D] Malaria

**[Q.55]** Study the diagrams and choose the correct option.

[A]

Animals have Fur

Rabbit  Snake

[B]

Animals have Scales

Rabbit  Snake

[C]

Animals have Feathers

Parrot  Rat

[D]

Animals have Patterns on their skin

Zebra  Tiger

**[Q.56]** Match the Column I with Column II and select the correct option.

**Column I**

(A) Coconut

(B) Underground stem

(C) Cotton

(D) Pea

**Column II**

(i) Wind dispersal

(ii) Green Vegetable

(iii) Fibrous covering

(iv) Ginger

[A] A-i, B-ii, C-iii, D-iv

[B] A-iii, B-iv, C-i, D- ii

[C] A-iii, B-ii, C-iv, D-i

[D] A-i, B-iv, C-iii, D-ii

**[Q.57]** Two seeds are shown in the diagram below.

Dandelion seed  Maple tree seed
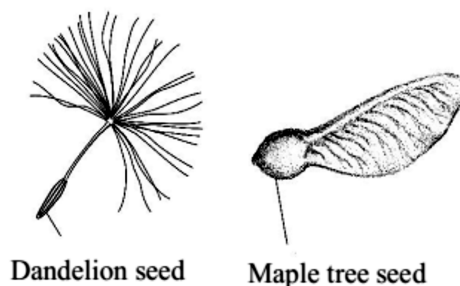
How are these seeds most likely dispersed?

[A] By wind

[B] In water

[C] On an animal's fur

[D] Eaten by animals

**[Q.58]** Which nutrient protects us against diseases ?

[A] Vitamin and minerals [B] Fats and carbohydrates

[C] Protein [D] All of these

**[Q.59]** What are the tiny bumps present on the tongue called ?

[A] Taste buds [B] Smell buds

[C] Flower buds [D] None of these

**[Q.60]** What solution is given when a person has vomiting and loose motions ?

[A] ORS [B] Fruit Juice

[C] Milk [D] None of these

# PART-E : MENTAL ABILITY

**[Q.61]** What direction will you face if you start facing west and make $\frac{1}{4}$ of a revolution clockwise?

[A] South [B] North [C] West [D] East

**[Q.62]** How many 3 digit numbers can be formed using digits 4, 5, 6 only once

[A] 5 [B] 6 [C] 3 [D] 4

**[Q.63]** Letters of the word given below have been jumbled up. You are required to construct the word. Each letter has been numbered. Choose the option which gives the correct order of the letters as indicated by the numbers to form the word.

**T R I F U**

**1 2 3 4 5**

[A] 3, 1, 2, 4, 5 [B] 4, 2,5, 3, 1 [C] 4, 3, 2, 1, 5 [D] 5, 3, 2, 1, 4

**[Q.64]** How many triangles are there in the following figure ?
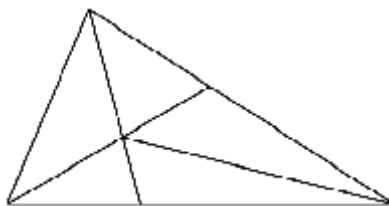


[A] 6 [B] 10 [C] 11 [D] 12

**[Q.65]** If in a certain language KINDLE is coded as ELDNIK, how is EXOTIC coded in that code ?

[A] CXOTIE [B] COXITE [C] CITOXE [D] EOXITC

**[Q.66]** X is brother of Y. B is brother of A. A is mother of X. What is B of Y ?

[A] Aunt [B] Niece [C] Nephew [D] Uncle

**[Q.67]**   Find the missing character from amongst the given alternatives



[A]   37            [B]   38            [C]   39            [D] 42

**[Q.68]**   A, B, C and D are playing a game on carrom board. A and B are partners. D faces towards North. If A faces towards West, then who faces towards South :
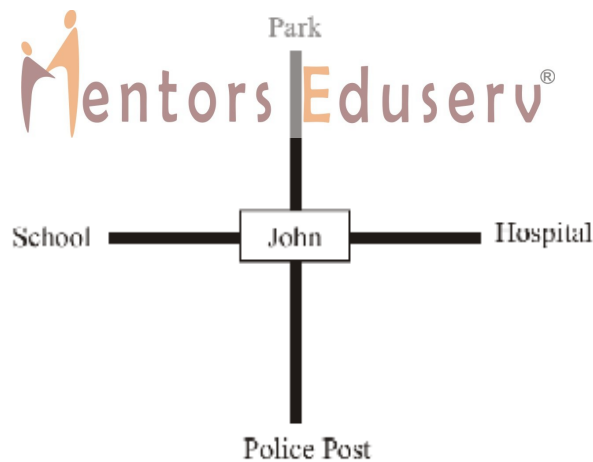
[A]   B            [B]  C            [C]  D            [D]  Data inadequate

**[Q.69]**   A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

109, 74, 46, 25, 11, ?

[A]   36            [B]  0            [C]  4            [D]  11

**[Q.70]**   John is facing the Police Post which is in South direction, In which direction is School situated ?



[A]    North            [B]  South            [C]  West            [D] East

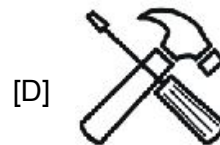**[Q.71]**   Find the missing term : A3B,  D9E,  G15H,  J21K, ?
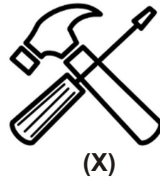
[A]    M27N            [B]  N27M            [C]  M25N            [D] N25M

**[Q.72]**   Find the missing number in the following series:-
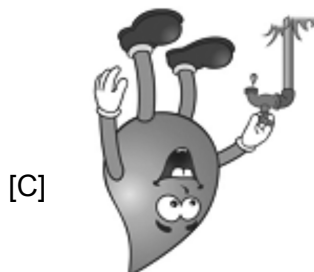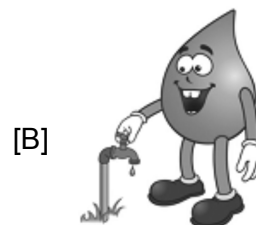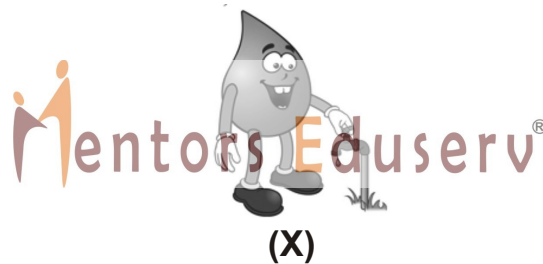
5, 10, 15, 20, 25, ?

[A]    45            [B]  50            [C]  35            [D] 30

**[Q.73]** What will be the Mirror Image of the figure (X), if the mirror is placed at the left side of the image?

**(X)**

[A]

[B]

[C]

[D]

**[Q.74]** What is the Water Image of Figure (X)?

**(X)**

[A]
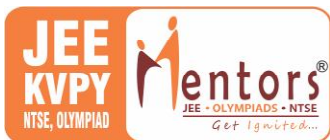
[B]

[C]

[D]

**[Q.75]** Find the Water Image of the given figure.

# MENTORS EDUSERV

## MENTORS EDUSERV TALENT REWARD EXAM (METRE)
## SAMPLE TEST PAPER

**[For Students presently in Class 5 going to Class 6 in 2022]**

**Time : 2 hours**                                                           **Maximum Marks: 225**

## PHYSICS

| | | | | |
|---|---|---|---|---|
| [Q.1] [A] | [Q.2] [B] | [Q.3] [C] | [Q.4] [D] | [Q.5] [D] |
| [Q.6] [B] | [Q.7] [B] | [Q.8] [C] | [Q.9] [B] | [Q.10] [B] |
| [Q.11] [D] | [Q.12] [B] | [Q.13] [D] | [Q.14] [C] | [Q.15] [B] |

## CHEMISTRY

| | | | | |
|---|---|---|---|---|
| [Q.16] [D] | [Q.17] [C] | [Q.18] [C] | [Q.19] [C] | [Q.20] [D] |
| [Q.21] [A] | [Q.22] [B] | [Q.23] [A] | [Q.24] [C] | [Q.25] [C] |
| [Q.26] [A] | [Q.27] [D] | [Q.28] [B] | [Q.29] [D] | [Q.30] [D] |

## MATHEMATICS

| | | | | |
|---|---|---|---|---|
| [Q.31] [C] | [Q.32] [A] | [Q.33] [A] | [Q.34] [C] | [Q.35] [B] |
| [Q.36] [B] | [Q.37] [B] | [Q.38] [B] | [Q.39] [D] | [Q.40] [B] |
| [Q.41] [A] | [Q.42] [D] | [Q.43] [D] | [Q.44] [C] | [Q.45] [B] |

## BIOLOGY

| | | | | |
|---|---|---|---|---|
| [Q.46] [C] | [Q.47] [D] | [Q.48] [B] | [Q.49] [C] | [Q.50] [A] |
| [Q.51] [A] | [Q.52] [A] | [Q.53] [D] | [Q.54] [C] | [Q.55] [D] |
| [Q.56] [B] | [Q.57] [A] | [Q.58] [A] | [Q.59] [A] | [Q.60] [A] |

## MENTAL ABILITY

| | | | | |
|---|---|---|---|---|
| [Q.61] [B] | [Q.62] [B] | [Q.63] [B] | [Q.64] [D] | [Q.65] [C] |
| [Q.66] [D] | [Q.67] [B] | [Q.68] [B] | [Q.69] [C] | [Q.70] [C] |
| [Q.71] [A] | [Q.72] [D] | [Q.73] [D] | [Q.74] [C] | [Q.75] [A] |