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SAMPLE TEST PAPER
for
CLASS V

"TALLENTEX COORDINATION CELL"

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A Specially Designed Initiative at National Level to Encourage Young Talent
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INSTRUCTIONS

Time duration: 2:00 hours.

Maximum Marks: 320

This Question Paper contains 80 MCQs with 4 choices (Subjects: Physics: 12, Chemistry: 11, Biology: 12 & Maths: 25, Mental ability: 20).
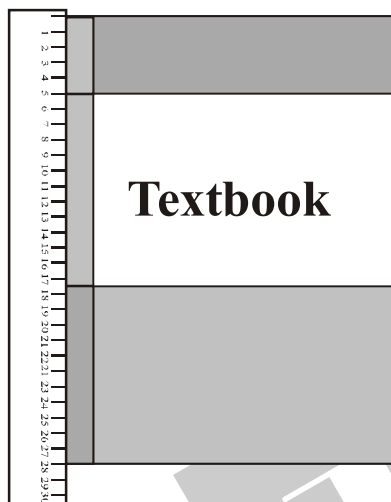
Marking Scheme: For each correct answer **4 marks** are awarded. In case of no response zero mark will be awarded. (There is **NO NEGATIVE** marking).

SECTION - A : PHYSICS

This section contains **12 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

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?

(1) centimeters   (2) grams

(3) gallons   (4) °C

2. In the given figure the length of the pipe is

(1) 9 cm   (2) 7 cm   (3) 6 cm   (4) 5 cm

**3.** Earth revolves around the sun and rotates on its own axis.
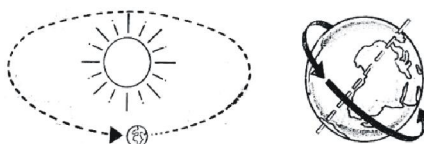
Study each statement below.

A. Earth takes 365 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.

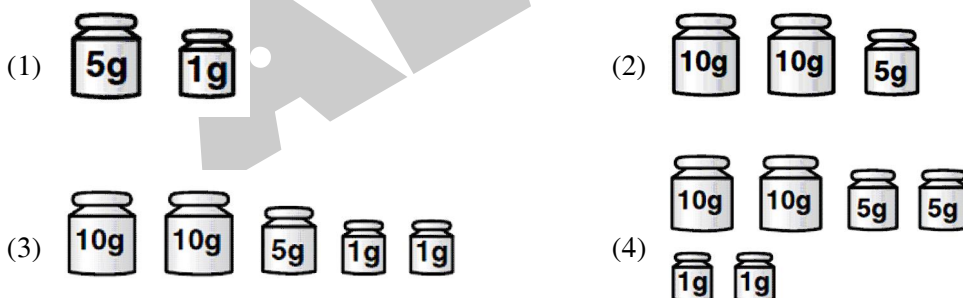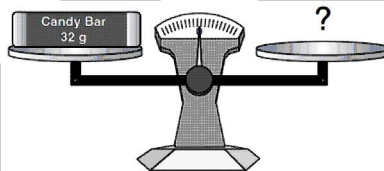(1) A ; B ; C ; D   (2) C ; D   (3) B ; C ; D   (4) B ; C

4. Which of these shows a pulley?

(1)   (2)   (3)   (4)
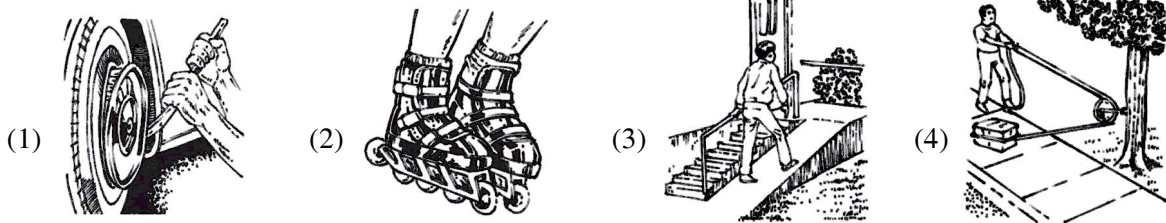
5. When tectonic plates collide, molten rock from beneath Earth's crust is sometimes forced up through the surface. When this occurs, it is called

(1) a mountain   (2) an earthquake   (3) a rift   (4) a volcano

6. Which group of weights has a mass of 32 grams?

(1) 5g 1g

(2) 10g 10g 5g

(3) 10g 10g 5g 1g 1g

(4) 10g 10g 5g 5g 1g 1g

7. The diagrams A and B below show a student moving the same boxes in two different ways. In diagram B, the student is using wheels, which are part of a simple machine.

(A)   (B)
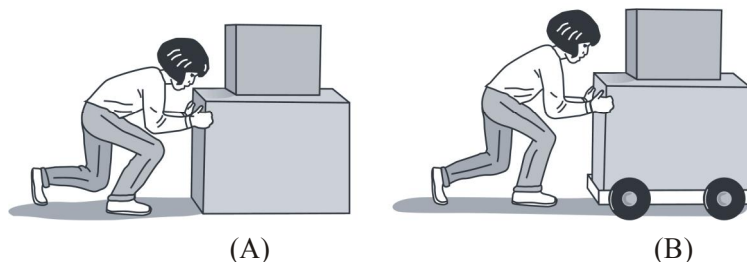
It will be easier for the student to use wheels to push the boxes in diagram B because there is

(1) less mass   (2) less friction   (3) more gravity   (4) more erosion

**8.** The diagram below shows some of the planets in our solar system.
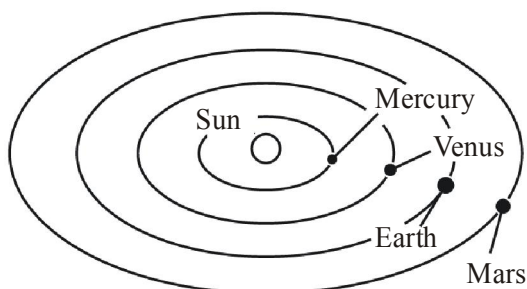
Which statement best describes these planets?

(1) They are made of gases.

(2) They are made of rock.

(3) They move at the same speed around the Sun.

(4) They travel the same distance around the Sun.

9. The figure below shows the different layers in Earth's atmosphere. Which layer is most affected by the emission of car exhaust and smoke?

(1) Exosphere   (2) Mesosphere   (3) Stratosphere   (4) Troposphere

10. An athlete is trying to lift some weights. He successfully lifts 200 N weights, but when he tries to lift 400 N weights, he is unsuccessful.
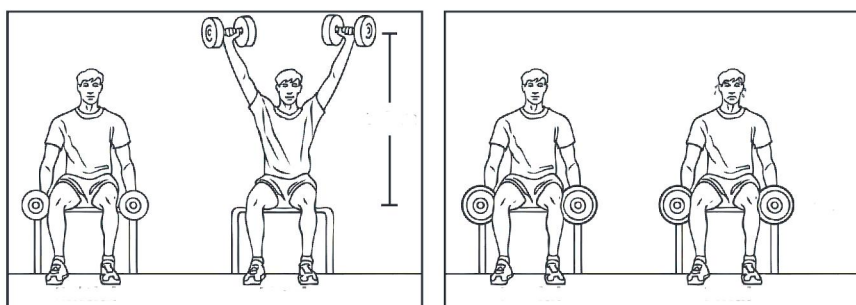

Which of these correctly compares the amount of work the athlete does on the weights?

(1) The athlete does no work on either the 200 N weights or the 400 N weights.

(2) The athlete does no work on the 200 N weights but does work on the 400 N weights.

(3) The athlete does work on both the 200 N weights and the 400 N weights.

(4) The athlete does work on the 200 N weights but does no work on the 400 N weights.

11. Earthquake vibrations are detected, measured and recorded by an instrument called

(1) sonargraph   (2) seismograph   (3) richter scale   (4) magnetometer

12. Ritu weighed cabbage(A), carrots (B), chocolate (C) and a bag of flour (D) as shown in the diagram.

Arrange them in descending order of mass.

500 g   1 kg   100 g   5 kg

A   B   C   D
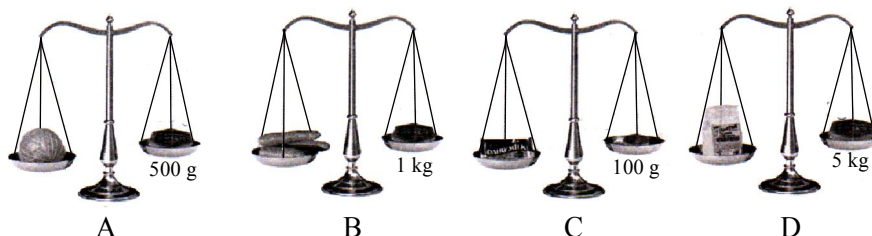
(1) B > D > A > C   (2) C > D > B > A   (3) D > B > A > C   (4) D > B > C > A

SECTION-B : CHEMISTRY

This section contains **11 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

13. 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?
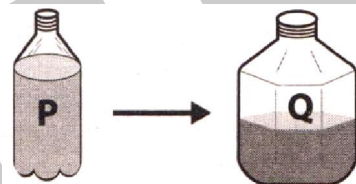

(1) Volume   (2) Mass   (3) Temperature   (4) Shape

14. Four children can feel and smell an object inside a bag, but they cannot see it. Which of the following is 'NOT' an observation about the object?

(1) It is flat at one end and round at the other.

(2) It smells like peppermint.

(3) It has a bump on it.

(4) I hope it is candy.

15. Clothes take long time to dry

(1) when the weather is windy

(2) when the air is wet

(3) when the temperature is high

(4) when the air is dry

16. What do all rocks have in common?

(1) Same size   (2) Same colour

(3) They all have minerals   (4) Same shape

17. Which statement provides the best description of the mineral property called streak?

(1) Streak is the way a mineral reflects light from its surface.

(2) Streak is the colour of the powder left by a mineral when it is rubbed against a surface.

(3) Streak is the ability of a mineral to resist being scratched.

(4) Streak is the tendency of a mineral to easily break along smooth, definite surfaces.

18. Matter changes from one state to another with change in

(1) Mass   (2) Temperature   (3) Volume   (4) Height

19. Use the data table below to answer the question.

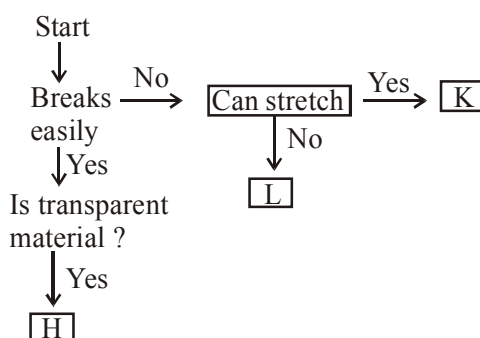| Observations of Unknown Object |
| --- |
| is shiny |
| conducts electricity |
| is not magnetic |

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

(1) Iron   (2) Polished wood   (3) Copper   (4) Plastic wrap

20. Which human activity/activities is/are the main cause(s) of water pollution?
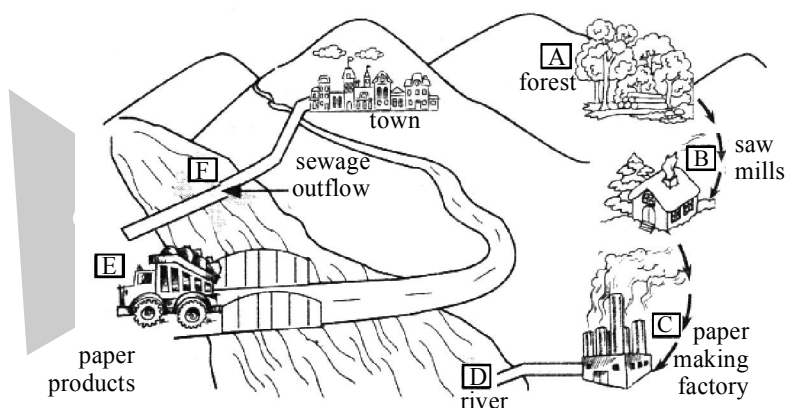
(1) A and B only   (2) B and D only   (3) Both C and F   (4) A and F only

21. Some students make a model to show one of the first steps in the formation of sedimentary rock. The students pour 2 centimeters of light-coloured sand into a clear plastic box. Then they add 1 centimeter of gravel. Finally they pour 2 centimeters of dark-coloured sand on top of the gravel. Which characteristic of sedimentary rock does this model best show?

(1) Sedimentary rock is made of layers.

(2) Sedimentary rock is a decorative rock.

(3) Sedimentary rock is often limestone.

(4) Sedimentary rock is common in Texas.

22. Study the given flowchart carefully and select the correct option regarding it.

Start
↓
Breaks $\xrightarrow{\text{No}}$ Can stretch $\xrightarrow{\text{Yes}}$ K
easily
↓ No
↓ Yes
Is transparent L
material ?
↓ Yes
H

(1) A wooden chair can be placed at box K   (2) A clay pot can be placed at box H
(3) A glass plate can be placed at box H   (4) A paper can be placed at box K

23. Match the following.

Column A		Column B
(i)	Solid	(a) Liquid to gas
(ii)	Liquid	(b) Solid to liquid
(iii)	Evaporation	(c) Gas to liquid
(iv)	Condensation	(d) Particles are tightly packed
(v)	Melting	(e) Flow

(1) (i) - (b), (ii) - (e), (iii) - (a), (iv) - (d), (v) - (c)
(2) (i) - (d), (ii) - (e), (iii) - (a), (iv) - (c), (v) - (b)
(3) (i) - (e), (ii) - (b), (iii) - (c), (iv) - (a), (v) - (d)
(4) (i) - (d), (ii) - (e), (iii) - (c), (iv) - (a), (v) - (b)

SECTION-C : BIOLOGY

This section contains **12 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

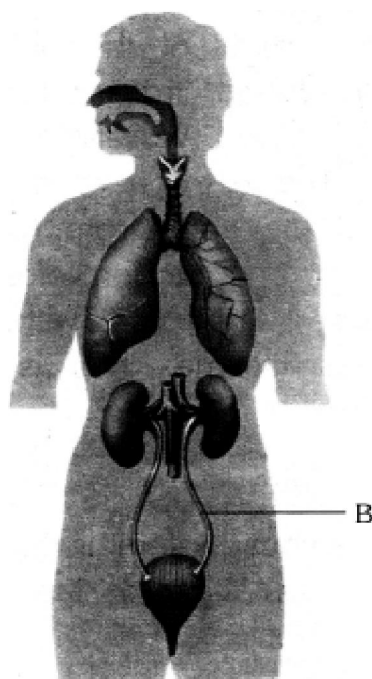**24.** Identify A gas in the diagram given below.
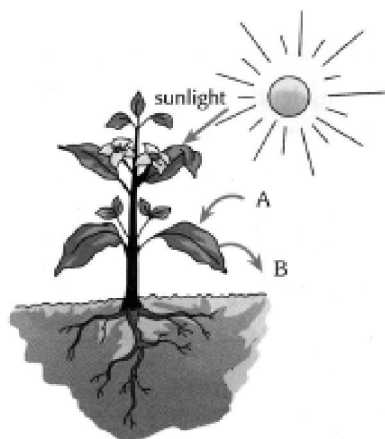
Process of Photosynthesis

(1) CO_2 (2) Sunlight   (3) O_2 (4) Soil

25. Identify the part labelled as B in the given figure.

(1) Kidney   (2) Ureter   (3) Urinary bladder   (4) Lungs

26. Each bone has a particular job. What is the job of the skull?

(1) Pumps blood to the brain.

(2) Tells the brain what to do?

(3) Helps the body to make decisions.

(4) Protects the brain.

**27.** Which of the following statement is not correct ?

(1) Pupa are larva of frog.

(2) Tadpole is larva of frog which has tail.

(3) Tadpole undergo process of meta-morphosis

(4) All of the above

28. Roots of plants growing in marshy area become aerial as given in picture. This adaptation helps the roots to get

(1) more support

(2) air to breath

(3) more water

(4) minerals from air

29. Given below is a life cycle of butterfly. Name the stages in sequence from A to D.

Butterfly Life Cycle
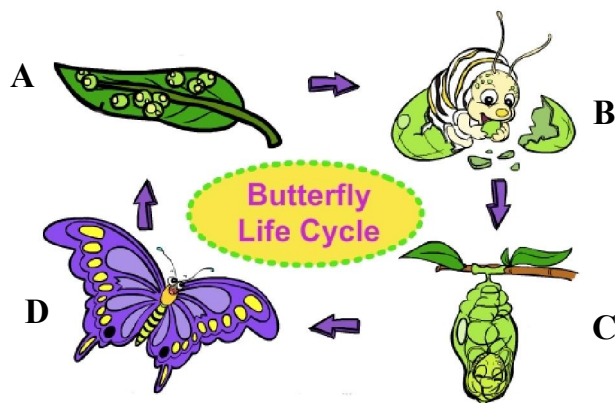
(1) pupa, caterpillar, egg, adult   (2) egg, caterpillar, pupa, adult

(3) egg, pupa, caterpillar, adult   (4) egg, adult, caterpillar, pupa

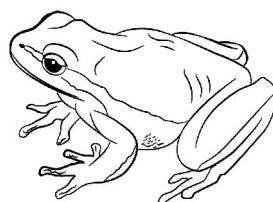30. Match the column A with column B and choose the correct option.

Column A	Column B
(1) Green colour of leaf	(i) Starch
(2) Stored food	(ii) Leaf blade
(3) Flat part of leaf	(iii) Chlorophyll
(4) Food factory	(iv) Stomata
(5) Tiny pores	(v) Leaf

(1) (1) - (ii), (2) - (i), (3) - (iii), (4) - (v), (5) – iv

(2) (1) - (iii), (2) - (i), (3) - (ii), (4) - (v), (5) – iv

(3) (1) - (v), (2) - (iv), (3) - (ii), (4) - (i), (5) – iii

(4) (1) - (ii), (2) - (iv), (3) - (iii), (4) - (i), (5) – v
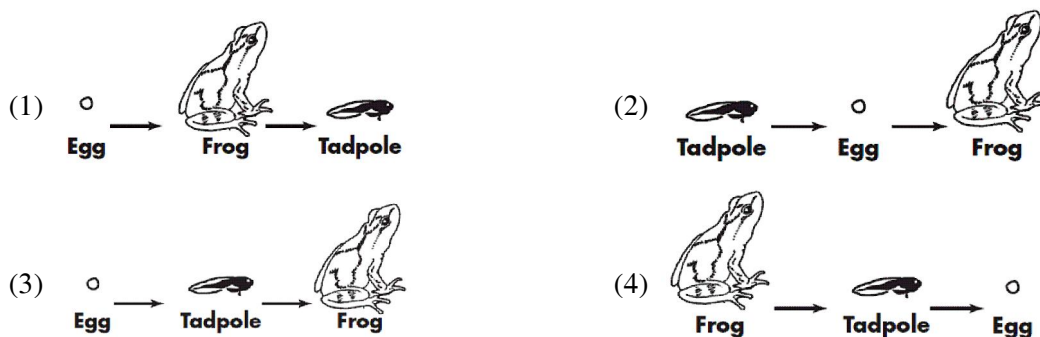
31.

Salamander   Frog

These animals show which of the following adaptation?

(1) Thick and less hairy skin

(2) Strong legs and sharp claws

(3) Moist skin

(4) None of the these.

32. Which of these structural adaptations allow the polar bear to survive in cold environment ?

    (a) Thick covering of fur   (b) A fat layer beneath the skin

    (c) Thin covering of fur   (d) No fat layer beneath the skin

    (1) a and b   (2) a, b and c

    (3) c only   (4) d only

**33.** Which diagram shows the correct life cycle of a frog?

(1) Egg → Frog → Tadpole

(2) Tadpole → Egg → Frog

(3) Egg → Tadpole → Frog

(4) Frog → Tadpole → Egg

34. The given table lists the parts of a violet plant and their functions. What is the function of violet flowers?

Violet Plants

Parts	Function
Roots	Anchor plant, absorb water
Stem	Support and transport
Leaves	Produce energy
Flowers	?

    (1) Release oxygen   (2) Produce seeds

   (3) Absorb sunlight   (4) Promote growth

35. Some plants attract, capture, kill and digest insects, such plants are known as insectivorous plants. Which of the following is a insectivorous plant?


(1) Pitcher plant

(2) Mushroom

(3) Hydrilla

(4) Bracket fungi
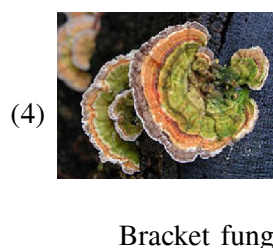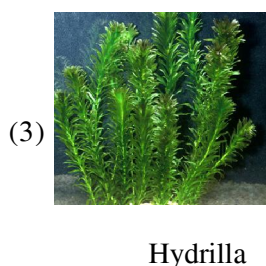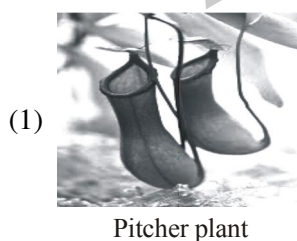
SECTION-D : MATHEMATICS

This section contains **25 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

36. The smallest counting number is

(1) 0   (2) 1   (3) 2   (4) 3

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?

(1) 32   (2) 36   (3) 38   (4) 45

**38.** How many triangles are contained in the figure?
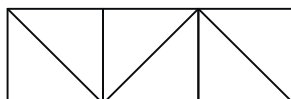
(1) 6   (2) 7   (3) 8   (4) 9

39. Ten million = _____

(1) 10 crore   (2) 1 crore   (3) 100 crore   (4) None of these

40. Subtract 760 cm from 896 cm.

(1) 0.136 m   (2) 136 m   (3) 13.6 m   (4) 1.36 m

41. The difference between the number MDCCLXXII and DCCCLX is

(1) DCCCCXII   (2) CMVIIIXX   (3) CMXII   (4) CMXIII

42. The angle that the hands of a clock make at 5 O'clock is

(1) 50º   (2) 100º   (3) 150º   (4) Cannot be determined

43. Write first five multiples of 16.

(1)16, 32, 48, 58, 68   (2)16, 32, 48, 64, 80   (3) 32, 48, 64, 80, 96   (4)16, 32, 45, 65, 85

44. Kg is _____ times of miligram.

(1) 1000000   (2) 100000   (3) 10000   (4) 1000

45. There are 48 flowers in a garland. How many flowers are there in 8 garland?

(1) 384   (2) 56   (3) 6   (4) 432

46. Which of the following number has more than 5 factors?

(1) 15   (2) 25   (3) 16   (4) 60

47. Five angles are labelled on the figure shown below.
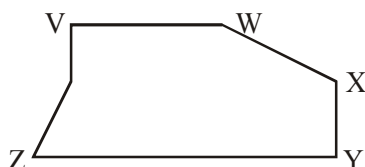
The labelled angles appear to be

(1) 1 acute angle, 1 right angle, and 3 obtuse angles.

(2) 1 acute angle, 2 right angles, and 1 obtuse angle.

(3) 1 acute angle, 2 right angles, and 2 obtuse angles.

(4) 2 acute angles, 1 right angle, and 2 obtuse angles.

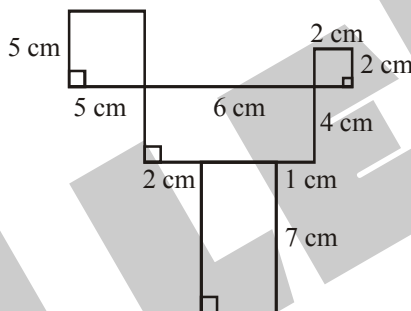**48.** Which of the following shape(s) will be called as quadrilateral?

(A)   (B)   (C)   (D)

(E)   (F)   (G)   (H)
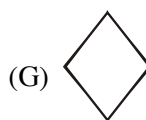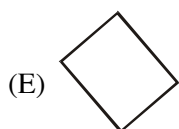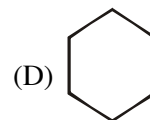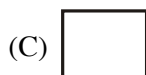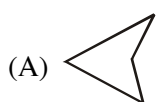
(1) C and E only

(2) A, C, E and H

(3) C, E, F and G only

(4) A, C, E, G and H only

49. Find the total area of the figure given below.

(1) 94 cm² 　　(2) 74 cm² 　　(3) 67 m² 　　(4) 67 cm²

50. From the sum of 89.02 m and 10337 cm, subtract the sum of 832 dm and 41.58 m

(1) 67610 cm 　　(2) 676.1m 　　(3) 67.61 m 　　(4) 6761 m

51. A door is a solid, what solid shape is it?

(1) Sphere 　　(2) Cuboid 　　(3) Cube 　　(4) Cylinder

52. The number of the prime numbers less than 50 is

(1) 25 　　(2) 14 　　(3) 16 　　(4) 15

53. Find the area of a rectangle whose sides measure 0.02 m and 0.06 m

(1) 10 cm² 　　(2) 24 cm² 　　(3) 12 cm² 　　(4) 1.2 cm²

54. Karan has placed a stool on a table to reach the top of his cupboard. If the height of the table is 98 mm and the stool is 65 cm, at what height in metres is Karan standing?
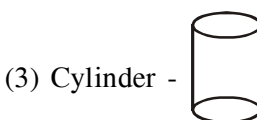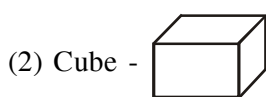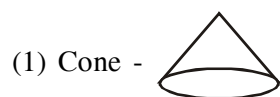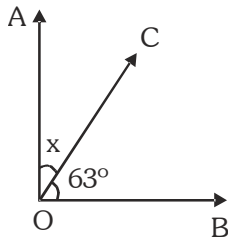
(1) 0.748 　　(2) 74.8 　　(3) 7.48 　　(4) 0.0748

55. Which of the following 3-D figure has 6-faces?

(1) Cone -   (2) Cube -   (3) Cylinder -   (4) None of these

56. Given ∠AOB = 90º, find the value of x.

    (1) 13º   (2) 23º   (3) 17º   (4) 27º

57. How many slabs of cement are required to tile a platform of length 8 m and breadth 6 m, if the length of each slab is 4 cm and breadth 3 cm.

    (1) 4000   (2) 20000   (3) 40000   (4) 2000

58. Which list shows the numbers in descending order ?

    (1) 6231 × 3, 1329 × 17, 5670 × 8, 5213 × 9

    (2) 3 hundredths, 6 tens, 7 hundredths, 70 ones

    (3) 18693 ÷ 3, 45360 ÷ 8, 46917 ÷ 9, 22593 ÷ 17

    (4) 1600 × 4, 1500 × 3, 500 × 6, 1500 × 5

59. The following shapes are pieces of a puzzle.

    Which term best describes all of these shapes ?

   (1) Hexagons   (2) Pentagons

    (3) Quadrilaterals   (4) Trapezoids

60. The perimeter of a rectangle is 60 cm. If its length is 20 cm, find its breadth.

    (1) 5 cm   (2) 10 cm   (3) 15 cm   (4) 20 cm

SECTION-E : MENTAL ABILITY

This section contains **20 Multiple Choice Questions.** Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

61. Jatin leaves his house and walks 12 km towards North. He turns right and walks another 12 km. He turns right again and walks 12 km more and turns left to walk 5 km. How far is he from his home and in which direction ?

    (1) 7 km East   (2) 10 km East   (3) 17 km East   (4) 24 km East

62. Arrange the given words in the sequence in which they occur in the dictionary and then choose the correct sequence.

    a. Old   b. King   c. Pear   d. Rough

    (1) a,b,c,d   (2) b,c,d,a

    (3) c,b,a,d   (4) b,a,c,d

63. 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 :

(1) B   (2) C   (3) D   (4) Data inadequate

64. Arrange the given words in the sequence in which they occur in the dictionary and then choose the correct sequence.

a. Wound   b. Writer   c. Whiter   d. Worst   e. Worked

(1) a, d, c, e, b   (2) b, a, c, d, e   (3) c, e, d, a, b   (4) e, c, b, a, d

65. 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, ?

(1) 36   (2) 0   (3) 4   (4) 11

66. John is facing the Police Post which is in South direction, In which direction is School situated ?
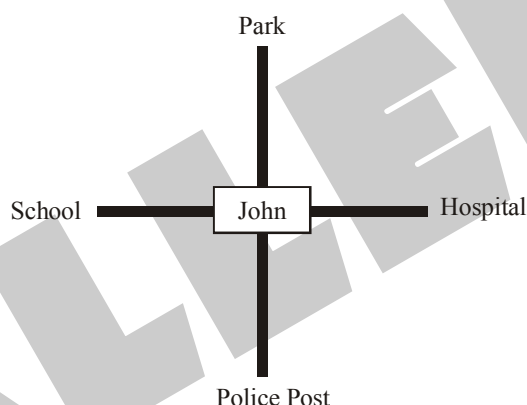

(1) North   (2) South

(3) West   (4) East

67. If the words in the sentence, "She showed several sample snaps" are rearranged in the alphabetical order, which will be the middle word?

(1) Snaps   (2) She   (3) Sample   (4) Several

68. Find the missing term :

A3B, D9E, G15H, J21K, ?

(1) M27N   (2) N27M   (3) M25N   (4) N25M

69. Find the missing number in the following series:-

5, 10, 15, 20, 25, ?

(1) 45   (2) 50   (3) 35   (4) 30

70. Rohan ranks seventh from the top and twenty-sixth from the bottom in a class. How many students are there in the class?

(1) 31   (2) 32   (3) 33   (4) 34

71. How many children like only Ice-cream?

ICE-CREAM   CHOCOLATE
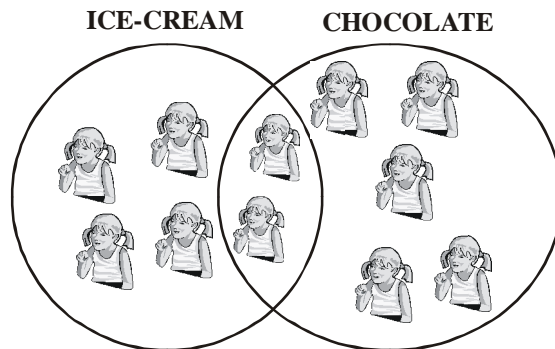
(1) 6   (2) 4   (3) 2   (4) 5

72. Which of the following diagram indicates the best relation between Hockey, Football and Cricket?

(1)   (2)   (3)   (4)
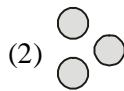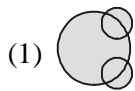
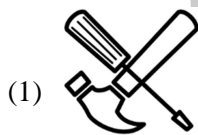**73.** If TORTOISE is coded as 7 then in the same way RAJESHWARI is coded as –

(1) 10   (2) 8   (3) 9   (4) 11

74. In a row of 18 persons, position of A from left side of the row is 6th. Find the number of persons after A in the row?

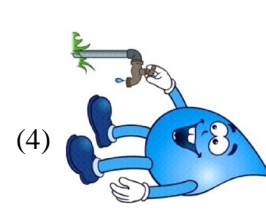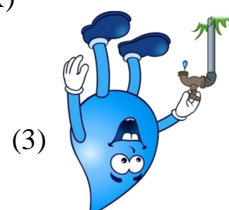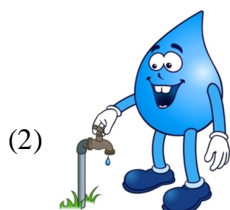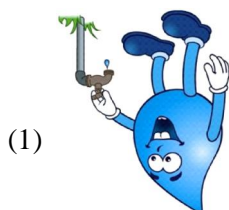(1) 12   (2) 11   (3) 13   (4) 10

75. What will be the Mirror Image of the figure (X), if the mirror is placed at the left side of the image?

(X)

(1)   (2)   (3)   (4)

76. Find the odd one out?

(1) Parrot   (2) Cat   (3) Dog   (4) Cow

77. What is the Water Image of Figure (X)?

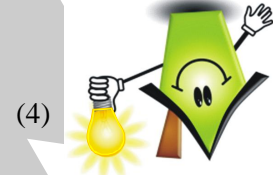

(X)

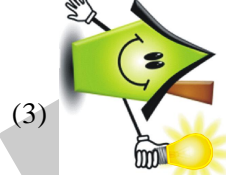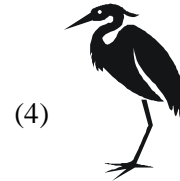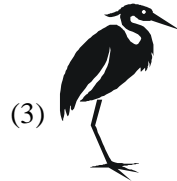(1)   (2)   (3)   (4)

78. Find the odd term from the given alternatives

(1) Pond   (2) Shore   (3) River   (4) Sea

79. What will be the Mirror Image of the figure (X), if the mirror is placed at the left side of the image?

(X)

(1)   (2)   (3)   (4)

80. Find the Water Image of the given figure.

(1)   (2)   (3)   (4)

TALLENTEX
ALLEN'S Talent Encouragement Exam

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	1	2	3	4	4	4	2	2	4	4	2	3	4	4	2
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	3	2	2	3	3	1	3	2	1	2	4	1	2	2	2
Que.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	3	1	3	2	1	2	2	3	2	4	3	3	2	1	1
Que.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	4	3	4	2	3	2	4	3	1	2	4	3	3	2	2
Que.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	3	4	2	3	3	3	2	1	4	2	2	2	3	1	4
Que.	76	77	78	79	80										
Ans.	1	3	2	2	1										