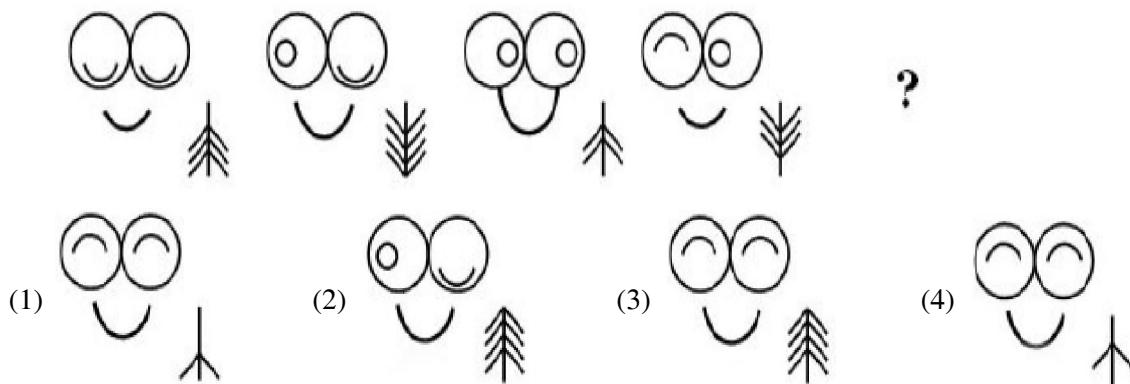


PART-I

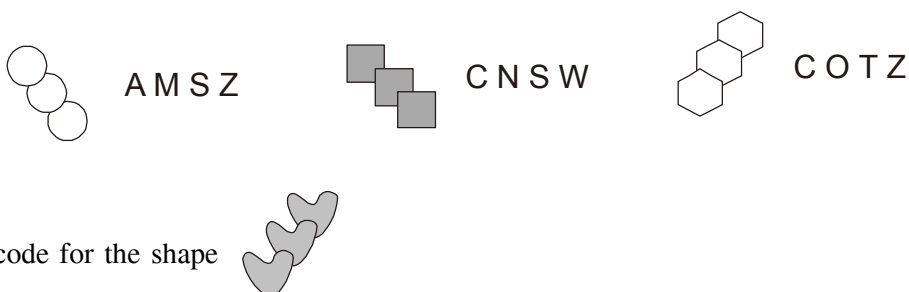
IQ (MENTAL ABILITY)

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

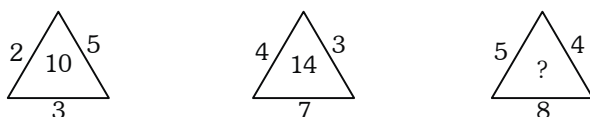
1. For the following question select the answer which most simply and logically continues the series:



2. If the first and last i.e. the first and the 26th letter of the English alphabet are paired, the second and 25th, the third and the 24th and so on are paired which of the following would be such a pair?
(1) CX (2) CU (3) DX (4) DU
3. In a row of trees, one tree is fifth from either end of the row. How many trees are there in the row?
(1) 8 (2) 9 (3) 10 (4) 11
4. The picture given each have a set of letters, you need to work out the code that applies to the shape in the question ?

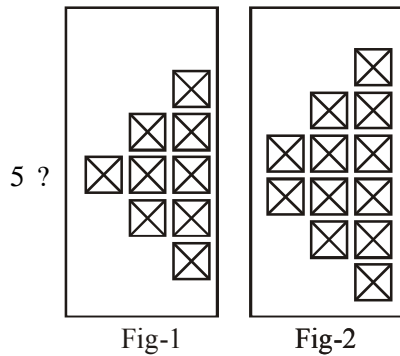


- (1) A P S Z (2) C P T Z (3) A P T W (4) A O T W
5. Find the missing character from among the given alternatives



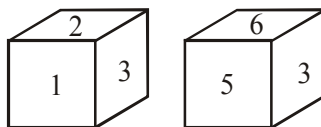
- (1) 13 (2) 10 (3) 15 (4) 17
6. A is to the south of R and to the West of T. If P is to the South of A, then in which direction P is with respect to T?
(1) South (2) North-East (3) South-West (4) North

7. Study the adjoining figures which follow a certain pattern. How many squares do you need in figure

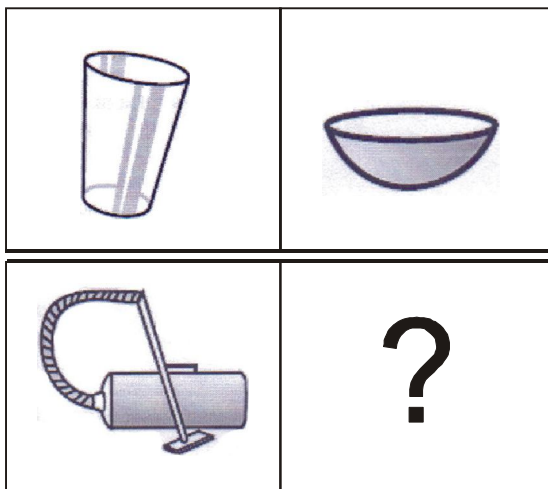


- (1) 15 (2) 18 (3) 21 (4) 24

8. Which digit will appear on the face opposite to the face with number 4 :-



- (1) 3 (2) 5 (3) 6 (4) 1
9. If $P = 0$, $Q = 1$, $R = 22$, $S = 35$ and $T = 57$, then what is $R + S \times P = ?$
- (1) R (2) P (3) Q (4) S
10. Which figure will complete the second pair in the same way as the first pair :

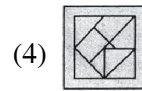
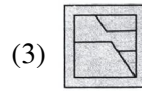
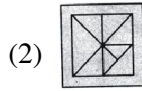
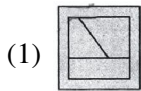


- (1) (2) (3) (4)

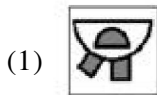
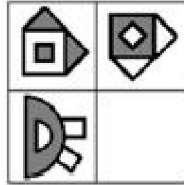
11. A Figure(X) is given below. Choose a figure from the four option that embedded the figure (X).



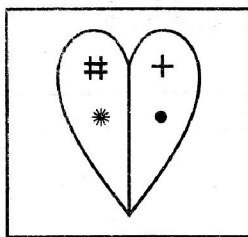
(X)



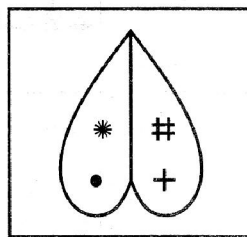
12. Which shape or pattern completes the larger square ?



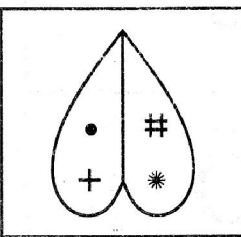
13. Tick (✓) the correct water image of the object.



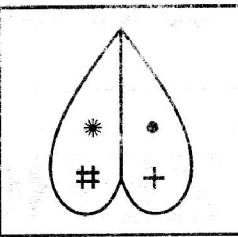
Object



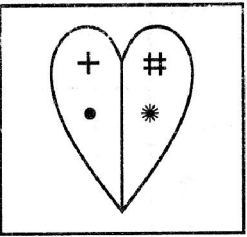
(1)



(2)



(3)



(4)

Directions (Q.14 to Q.16) : Six persons A, B, C, D, E and F and sitting in two rows, three in each, facing each other.

(I) E is not at the end of any row.

(II) D is second to the left of F.

(III) C the neighbour of E, is sitting diagonally opposite to D.

(IV) B is the neighbour of F.

14. Who is facing B ?

(1) C

(2) A

(3) D

(4) E

15. Who among the following are in one of the two rows ?

(1) C, E, B

(2) D, B, F

(3) A, B, F

(4) A, E, F

16. Who among the following are sitting diagonally opposite to each other ?

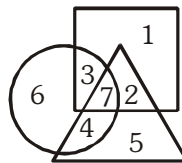
(1) A and C

(2) F and C

(3) A and F

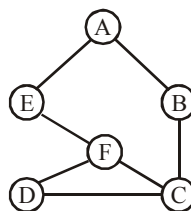
(4) A and B

17. In the following figure, the \triangle represents educated, the \bigcirc represents urban and the \square represents the honest people. Study the figure carefully and answer the question which follow.

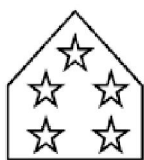


Which number represents who are honest but not educated and not urban?

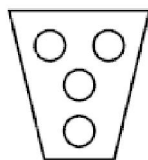
- (1) 2 (2) 1 (3) 6 (4) 3
18. In the adjoining figure how many different paths can be travelled from point A to point D by visiting a point only once?



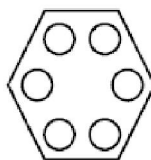
- (1) 2 (2) 3 (3) 4 (4) 5
19. In the following question consists of four shapes in a row. They all have something in common, except one. You must find the odd one out. Choose the shape that you think does not go with the other three



(1)



(2)



(3)



(4)

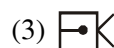
20. If \triangle is to ∇ then \square is to :-



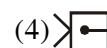
(1)



(2)



(3)



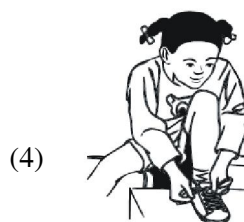
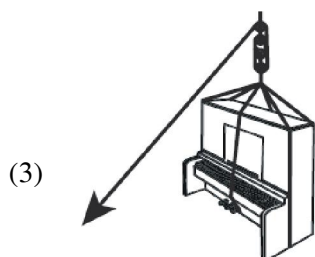
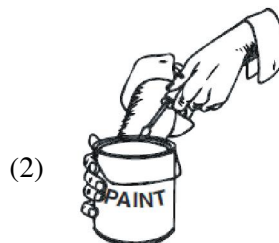
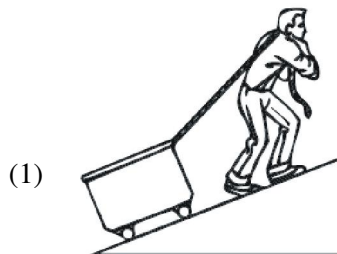
(4)

PART-II

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.

21. Which of these diagrams shows a lever being used to do work?



22. Which of the given figures best demonstrates a magnetic force ?

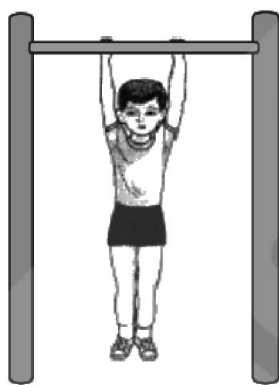


Fig.1



Fig.2



Fig.3

(1) Fig. 1

(2) Fig. 2

(3) Fig. 3

(4) Both Fig.1 and Fig.2

23. In which of the following cases work is said to be done ?

(1) Holding a heavy box

(2) Watching cartoon movie

(3) Cycling in a race

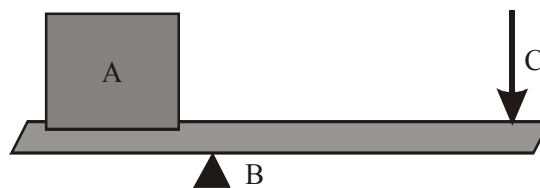
(4) Thinking of the answer in examination hall

24. A boy throws a basketball into the air. Which of the forces listed below act on the ball after he throws it ?

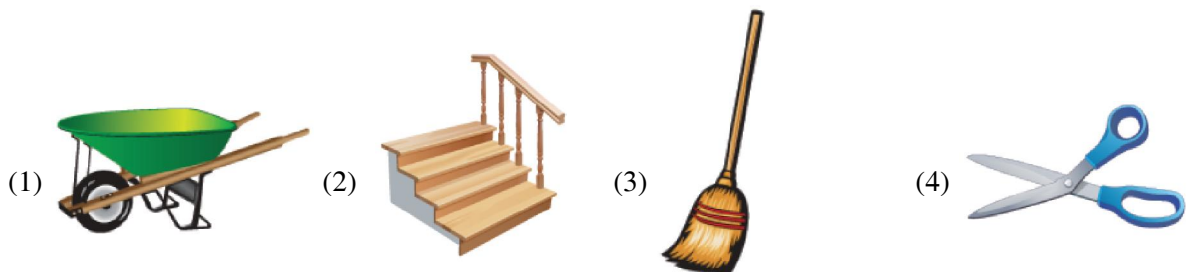


- (A) Magnetic force (B) Electric force (C) Force of gravity (D) Air resistance to the ball
(1) only A and B (2) only B and C (3) only C and D (4) All, A, B, C and D

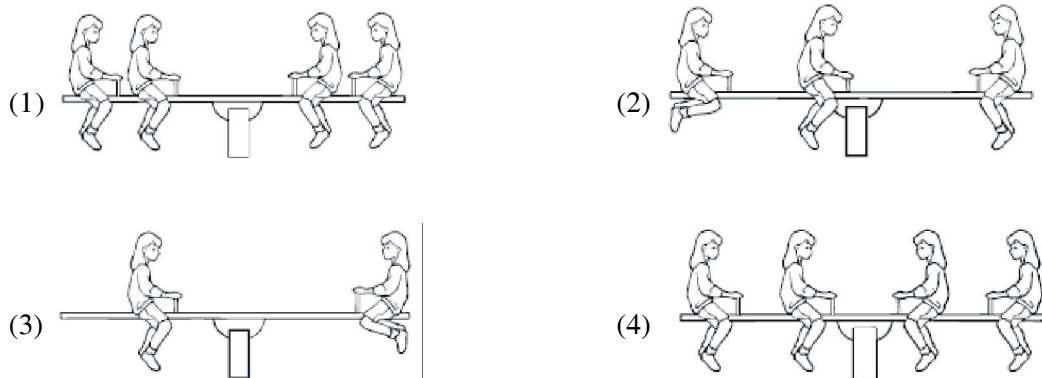
25. Look at the lever below.



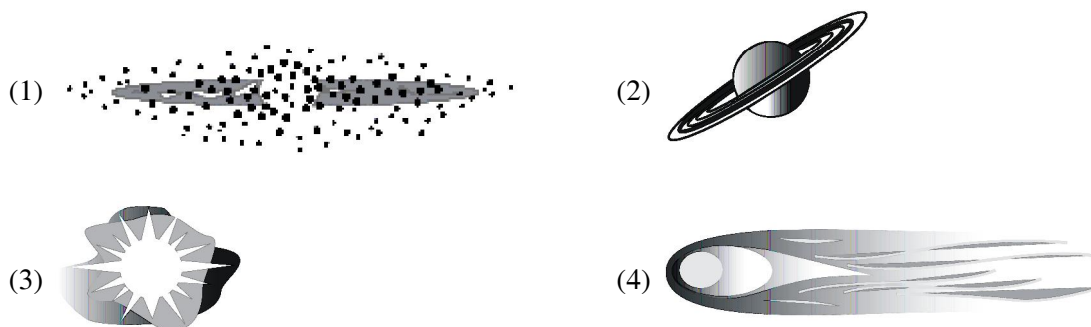
Which object is the same class lever as the model above?



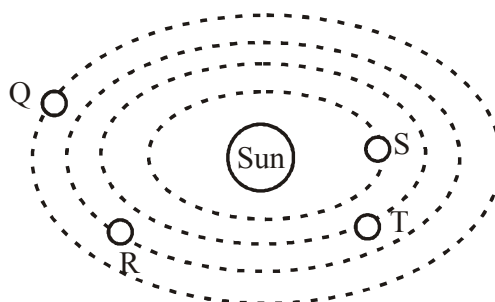
26. Which of these seesaws is most likely to tip to the left?



27. A galaxy is made up of a collection of stars, gas, and dust. According to this definition, which of these is a galaxy?



28. According to the given figure of planets revolving around the sun, which letter represents the planet where you live ?

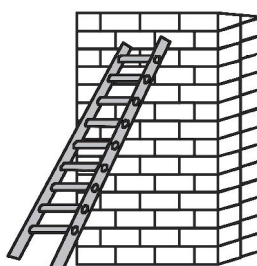


- (1) Q (2) R (3) S (4) T
29. A load is easier to move using the machine below.



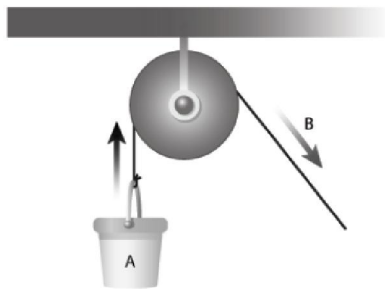
Which of these was reduced by using the wheelbarrow to move the soil?

- (1) Friction (2) Gravity (3) Load (4) Distance
30. The picture shows a ladder leaning against a wall. A person climbing this ladder is using the ladder to



- (1) Increase the amount of work done (2) Decrease the distance travelled
(3) Increase the force needed (4) Decrease the force needed

31. The pulley shown below moves objects



What is the main type of force used when a pulley moves an object?

- (1) gravitational (2) electrical (3) magnetic (4) muscular
32. Look at the data table below.

Planet	Time it takes to complete one revolution around the Sun	Time it takes to complete one rotation
Mercury	88 Earth days	58.7 Earth days
Venus	225 Earth days	243 Earth days
Earth	365 days	24 hours
Mars	687 Earth days	24.6 Earth hours
Jupiter	11.9 Earth years	9.84 Earth hours
Saturn	29.5 Earth years	10.2 Earth hours
Uranus	84 Earth years	17.9 Earth hours
Neptune	164.8 Earth years	19.1 Earth hours

On which planet is a day longer than a year?

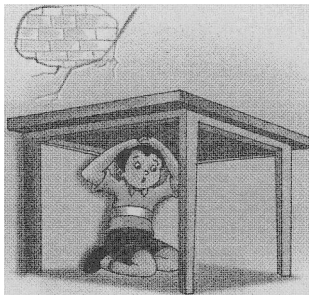
- (1) Mercury (2) Venus (3) Mars (4) Jupiter

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.

33. Which of the following is not a sedimentary rock ?
 (1) Conglomerate (2) Limestone (3) Shale (4) Slate
34. Name the Cyclone which hit Andhrapradesh coast this year mid of October _____.
 (1) Phialin (2) Hudhud (3) Haiyan (4) Majurka
35. Red Fort of Delhi is made of
 (1) Marble (2) Sandstone (3) Basalt (4) Slate
36. Ground water
 (1) Helps in germination of seeds (2) Maintains the moisture of the soil
 (3) Keeps green the deep rooted trees (4) All of the above
37. Green house effect is mostly due to
 (1) Hydrogen (2) Carbon monoxide (3) Carbon dioxide (4) Nitrogen
38. Wastes that can be broken down by microbes in the soil is
 (1) Biodegradable wastes (2) Non-biodegradable wastes
 (3) E-wastes (4) None of these

39. Which of the following is not a human activity?
 (1) Formation of Igneous rock (2) Deforestation
 (3) Soil erosion (4) Afforestation
40. In which situation the following precaution (shown in picture) should be taken?

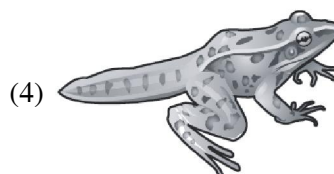
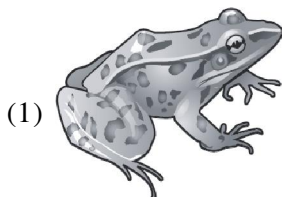


- (1) Volcanic eruption (2) Flood (3) Earthquake (4) Tsunami
41. The process of changing of rock from one type to another type is called
 (1) Erosion (2) Rock cycle (3) Carbonisation (4) None of these
42. The rocks formed when existing rocks change due to heat or pressure are
 (1) Sedimentary rocks (2) Igneous rocks (3) Metamorphic rocks (4) Metals
43. Which of the following statements is wrong about petroleum ?
 (1) Petroleum is a fossil fuel.
 (2) Due to its high economical value it is also called black gold
 (3) Petrol is also used for dry cleaning our clothes
 (4) Petrol do not cause pollution when burnt

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.

44. Organic substances needed in small quantities to maintain growth and metabolism are called
 (1) proteins (2) vitamins (3) minerals (4) fats
45. Disease can be
 (1) inherited (2) caused by toxic materials
 (3) the result of poor nutrition (4) a result of all of the above
46. Unlike dairy milk, soya milk provides some of the body's daily requirement for iron. In which of the following functions of the human body does iron serve a primary role?
 (1) Conducting nerve impulses (2) Strengthening bone structure
 (3) Causing muscle fibers to contract (4) Helping transport oxygen in the blood
47. Which of the following pictures shows a stage in a frog's life cycle when it breathes entirely through gills?



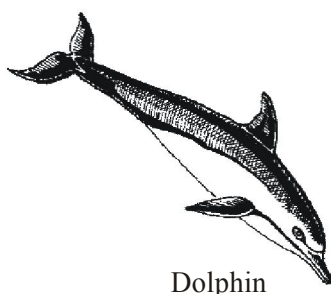
48. Cholesterol is related to
 (1) Fats (2) Carbohydrates (3) Proteins (4) Vitamin C
49. In picture given below you observe an animal having small ears, tail and nose. Where this animal is likely to be found and what advantage it has by having small body extremities ?



- (1) Tropical region; increases loss of body heat (2) Polar region; increases loss of body heat
 (3) Tropical region; decreases loss of body heat (4) Polar region; decreases loss of body heat
50. What is the function of simple sugars in the body?
 (1) They are the building blocks of proteins. (2) They are made of the same materials as fats.
 (3) They are a source of fiber. (4) They provide energy for cells.
51. Which animals given in the table have been classified INCORRECTLY?

Animals	Groups
Ant	Insect
Sea lion	Fish
Eel	Fish
Horse	Mammal
Bat	Bird

- (1) Ant and Eel (2) Sea lion and Eel (3) Eel and Bat (4) Sea lion and Bat
52. This is an air borne disease
 (1) Scabies (2) Typhoid (3) Measles (4) Malaria
53. This modified root is rich in vitamin A. You should include it in your diet to prevent disease like.....
 (1) Carrot : Haemorrhage (2) Radish : Anaemia
 (3) Carrot : Night blindness (4) Ginger : Scurvy
54. These animals are grouped together because all of them



- (1) Live in water (2) Are fishes (3) Are warm-blooded (4) Lay eggs

55. Look at the picture of a dinosaur fossil.



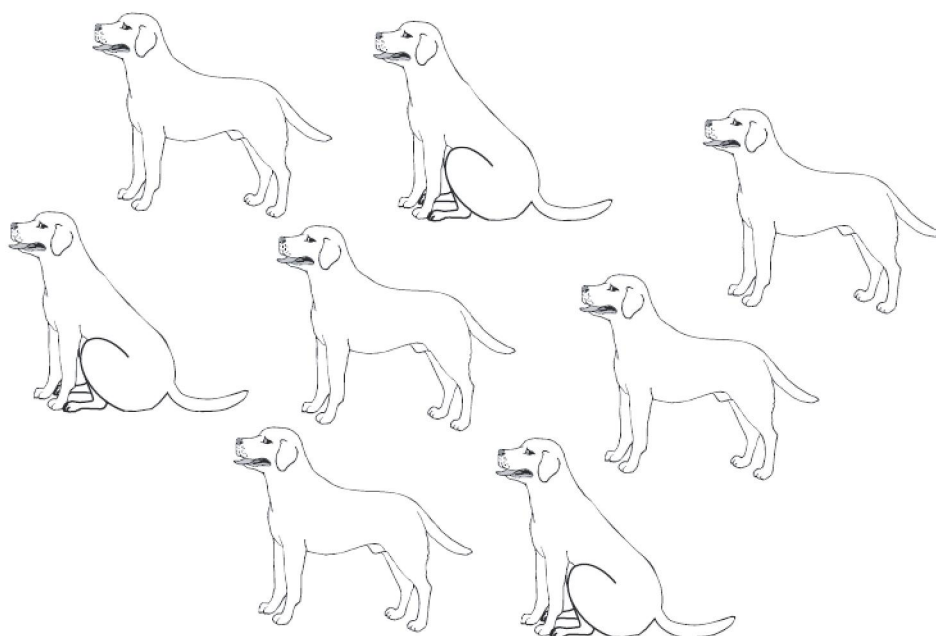
What can you infer about this animal from this fossil?

- (1) It was a carnivore. (2) It was a herbivore.
(3) It was nocturnal. (4) It migrated during winter.

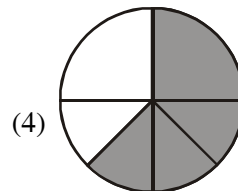
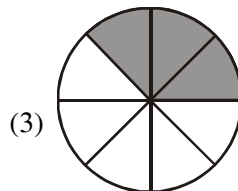
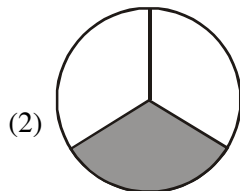
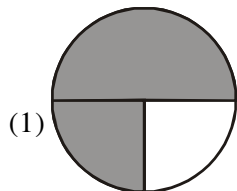
SECTION-D : MATHEMATICS

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

56. Look at the set of dogs.



Which circle is shaded gray to represent the fraction of the set of dogs that is sitting?



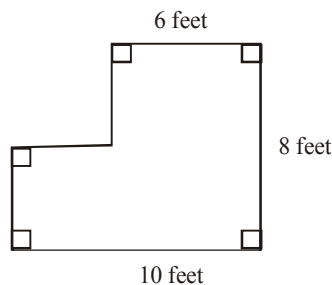
57. Monica used three different colors to paint a rectangle.

- $\frac{1}{2}$ of the rectangle is painted blue.
- $\frac{1}{6}$ of the rectangle is painted yellow.
- The rest of the rectangle is painted green.

What fraction of the rectangle is painted green ?

- (1) $\frac{3}{4}$ (2) $\frac{2}{3}$ (3) $\frac{1}{3}$ (4) $\frac{1}{12}$

58. The drawing below represents the dimensions of Sandy's backyard



What is the perimeter of Sandy's backyard ?

- (1) 24 feet (2) 32 feet (3) 36 feet (4) 80 feet

59. For a bake sale, 3 pies were each cut into 8 equal slices. During the sale, $1\frac{2}{8}$ of the pies were sold.

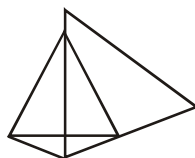
Which best explains the amount of these 3 pies that was not sold during the bake sale ?

- (1) 1 whole pie and 6 slices (2) 1 whole pie and 2 slices
 (3) 2 whole pies and 6 slices (4) 2 whole pies and 8 slices
60. Which figure can be drawn using two matchsticks (without breaking the sticks) ?
- (1) Square (2) Rectangle
 (3) Triangle (4) Angle
61. Which pair of operations will make the equation below true when inserted into the blank spaces in the order shown ?

$$2\frac{3}{10} \quad \underline{\hspace{1cm}} \quad 1.5 \quad \underline{\hspace{1cm}} \quad 2 = 1.8$$

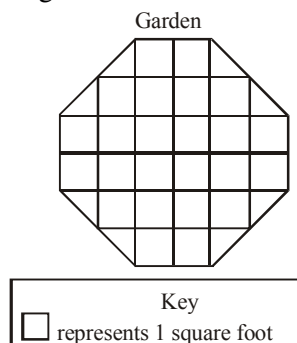
- (1) – and + (2) \times and + (3) + and – (4) \times and –

62. Count the number of triangles in given figure.



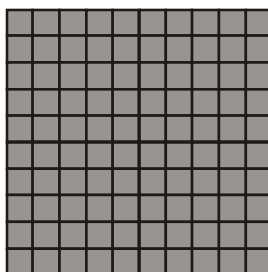
- (1) 5 (2) 6 (3) 4 (4) 9

63. The picture below shows the shape of a garden.

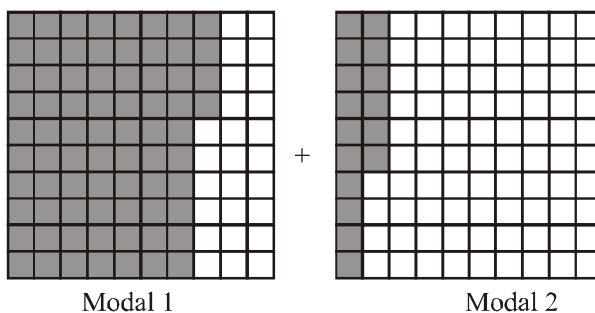


What is the area of the garden?

- (1) 24 square feet (2) 28 square feet (3) 32 square feet (4) 36 square feet
64. The model below is shaded to represent the number 1.

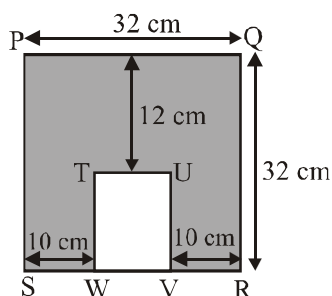


Each of the following models is shaded to represent a decimal number.



If the two decimals are added, what is the sum ?

- (1) 0.09 (2) 0.90 (3) 9.0 (4) 90.0
- Direction (Q. 65 - Q. 66) :** In the figure below, PQRS is square and TUVW is a rectangle.

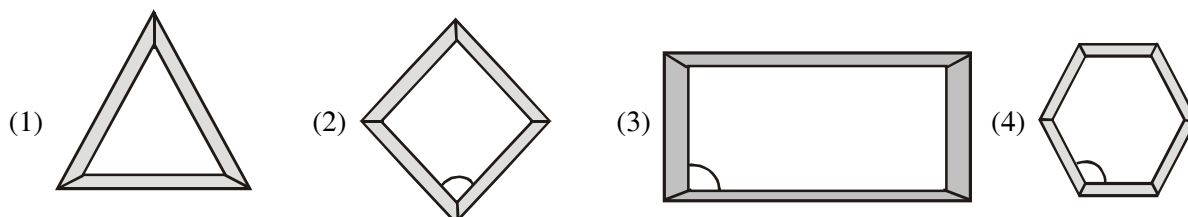


65. Find the area of TUVW.
(1) 315 sq. cm (2) 240 sq. cm (3) 292 sq. cm (4) 310 sq. cm
66. Find the remaining area if TUVW was removed from the figure.
(1) 716 sq. cm (2) 784 sq. cm (3) 700 sq. cm (4) 768 sq. cm

67. Gracy measures a bean plant at the end of every week. At the end of week 1, the plant is 4 inches tall. It grows $\frac{1}{2}$ inch each week for 5 more weeks. How tall is Gracy's bean plant at the end of week 5 ?

(1) 5 inches (2) $5\frac{1}{2}$ inches (3) 6 inches (4) $6\frac{1}{2}$ inches

68. Mr. Hamid makes frames. In which frame is the identified angle more than 90° ?



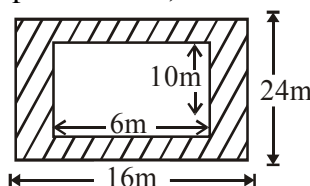
69. Kritika ran a 6 kilometer race on a 400-meter oval track. How many laps around the track did Kritika run?

(1) 0.15 lap (2) 1.5 laps (3) 15 laps (4) 150 laps

70. A goldsmith bought 1 kg gold and used 981.998 gm for making jewellery. How much gold is left with the goldsmith.

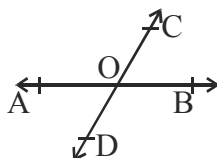
(1) 18.002 gm (2) 19.992 gm (3) 19.002 gm (4) 18.992 gm

71. Area of shaded region is (figure not upto the scale)



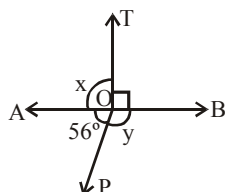
(1) 384 m^2 (2) 444 m^2 (3) 324 m^2 (4) none of these

72. AOB & COD are straight line then which of the following are pairs of vertically opposite angles



(1) $\angle AOC$ & $\angle BOD$; $\angle BOC$ & $\angle AOD$ (2) $\angle AOC$ & $\angle BOC$; $\angle BOD$ & $\angle AOC$
(3) $\angle AOC$ & $\angle COB$; $\angle BOD$ & $\angle AOD$ (4) None of these

73. AOB is a straight line, if $\angle TOB = 90^\circ$, then value of x & y is



(1) $x = 90^\circ$; $y = 56^\circ$ (2) $x = 90^\circ$; $y = 90^\circ$
(3) $x = 90^\circ$; $y = 65^\circ$ (4) $x = 90^\circ$; $y = 124^\circ$

74. A class has 40 students. Every student contributed Rs. 2.50 to the class fund. $\frac{3}{10}$ of the total fund was

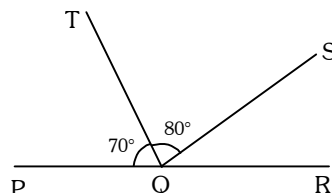
used by the class to buy prizes for a Mathematics quiz. How much money does the class fund have left?

- (1) Rs. 30 (2) Rs. 50 (3) Rs. 70 (4) Rs. 90

75. Express 15.72 in fraction form :

- (1) $\frac{15}{72}$ (2) $\frac{393}{25}$ (3) $\frac{1572}{1000}$ (4) 1572

76. Calculate $\angle TQR$ in the below figure, if PQR is straight line.



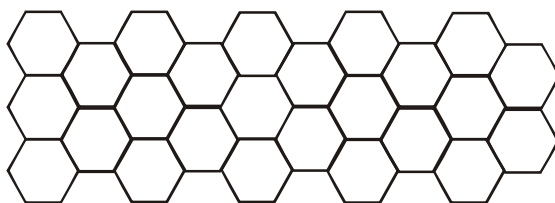
- (1) 150° (2) 110° (3) 30° (4) 40°

77. What is the missing value in the given pattern ?

$$0.25 \times 12 = 0.25 \times 3 + 0.25 \times 3 + 0.25 \times \underline{\hspace{1cm}}.$$

- (1) 2 (2) 3 (3) 6 (4) 8

78. How many of the shapes must be shaded so that $\frac{2}{5}$ of the figure is unshaded?



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

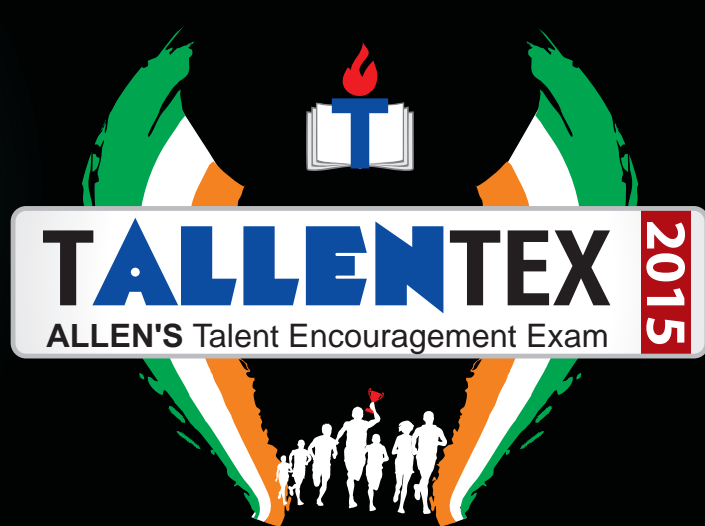
79. Which among the following is a reflex angle?

- (1) 180° (2) 90° (3) 250° (4) 50°

80. $30 - \left(\frac{2}{7} \div \frac{2}{21} \right) =$

- (1) 312 (2) $29\frac{143}{147}$ (3) 28 (4) 27

SPACE FOR ROUGH WORK



ANSWER KEY : CLASS - 5th (V)

(Held on : 16-11-2014)

Q. No.	1	2	3	4	5	6	7	8	9	10
Ans.	4	1	2	3	4	3	3	1	1	1
Q. No.	11	12	13	14	15	16	17	18	19	20
Ans.	1	4	3	4	2	3	2	3	4	3
Q. No.	21	22	23	24	25	26	27	28	29	30
Ans.	2	3	3	3	4	2	1	2	1	4
Q. No.	31	32	33	34	35	36	37	38	39	40
Ans.	4	2	4	2	2	4	3	1	1	3
Q. No.	41	42	43	44	45	46	47	48	49	50
Ans.	2	3	4	2	4	4	2	1	4	4
Q. No.	51	52	53	54	55	56	57	58	59	60
Ans.	4	3	3	1	1	3	3	3	1	4
Q. No.	61	62	63	64	65	66	67	68	69	70
Ans.	3	4	2	2	2	2	3	4	3	1
Q. No.	71	72	73	74	75	76	77	78	79	80
Ans.	3	1	4	3	2	2	3	3	3	4

