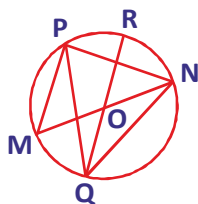
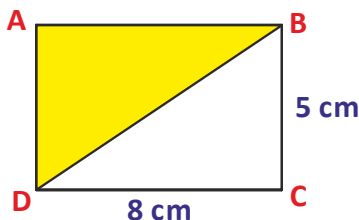


1. The figure shows a circle with centre O.



Identify the chord that is a diameter.

- (A) PN (B) PQ (C) NQ (D) MN
2. A rectangular tank measuring 40 cm by 20 cm by 21 cm is $\frac{3}{4}$ filled with water. How many litres of water does the tank contain ? ($1 \text{ l} = 1000 \text{ cm}^3$)
- (A) 4.2 l (B) 8.4 l
(C) 12.6 l (D) 16.8 l
3. The length of the rectangle shown is 8 cm and its breadth is 5 cm. What is the area of the shaded portion ?



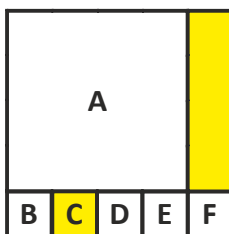
- (A) 20 cm (B) 40 cm (C) 20 cm² (D) 40 cm²

4. Tom watches television from 19:30 to 20:45 every day from Monday to Friday. On Saturday, he watches his favourite show from 13:30 to 16:05. If the total time he spends watching television for the whole week is 11 h 5 min, for how long does he watch television on Sunday ?
- (A) 2 h 20 min (B) 2 h 15 min
(C) 2 h 10 min (D) 2 h 5 min
5. Gopal spent the same duration of time cleaning his house every morning. He spent a total of 7 h 30 min cleaning his house for 5 mornings. How much time did he spend cleaning his house each morning ?
- (A) 120 min (B) 1 h 30 min
(C) 140 min (D) 1 h 50 min
6. A number with two decimal places is 15.8 when rounded off to 1 decimal place. What is the largest possible number ?
- (A) 15 (B) 15.79 (C) 15.84 (D) 16
7. 12 bags of rice are sold for ₹ 1539. There are 5 kg of rice in each bag. How much does 1 kg of rice cost ?
- (A) ₹ 25.65 (B) ₹ 27.25
(C) ₹ 128.25 (D) ₹ 29
8. How many 2 - digit numbers are multiples of both 6 and 9 ?
- (A) 2 (B) 3 (C) 4 (D) 5
9. A car travels at a speed of 40 km/hr. How far will it travel in 24 minutes ?
- (A) 24 km (B) 20 km
(C) 16 km (D) 40 km

10. Mary had some stamps. She gave $\frac{3}{8}$ of her stamps to her sister and $\frac{1}{4}$ of her stamps to her brother. What fraction of her stamps had she left ?

(A) $\frac{1}{4}$ (B) $\frac{5}{8}$ (C) $\frac{3}{4}$ (D) $\frac{3}{8}$

11. In the given square A, B, C, D, E and F are also squares. What fraction of the figure is shaded ?



(A) $\frac{1}{5}$ (B) $\frac{1}{4}$ (C) $\frac{1}{2}$ (D) $\frac{4}{6}$

12. Find the value of $973 + 10 \times (32 - 12) \div 2$.
 (A) 1073 (B) 9830 (C) 15722 (D) 31450
13. Simran bought a roll of wire. After using 11.8 m of it, she had 4.7 m left. What was the length of the roll of wire that simran bought ?
 (A) 16.5 m (B) 7.1 m (C) 10.1 m (D) 14.8 m
14. What is the missing number in the blank ?

$$32.46 + 10.23 + \underline{\hspace{2cm}} = 87$$

(A) 1.62 (B) 22.23 (C) 42.69 (D) 44.31

15. The H.C.F. of two numbers is 16 and their LCM is 672. If one number is 112, find the other.
(A) 96 (B) 84 (C) 78 (D) 48
16. The distance from Town A to Town B is 370 km. Riya starts from Town A and has covered 60% of the distance. How far is she away from Town B ?
(A) 48 km (B) 148 km (C) 222 km (D) 310 km
17. Convert 560 g to kilogram.
(A) 0.56 kg (B) 5.6 kg
(C) 5.06 kg (D) 0.056 kg
18. The number 2020 is a 4-digit number. What is the sum of the greatest 3-digit number, greatest 4-digit number and the given number ?
(A) 12019 (B) 3019 (C) 10998 (D) 13018
19. 48 glasses juice are needed to fill $\frac{4}{5}$ of a jar. How many glasses are needed to fill $\frac{1}{2}$ of jar ?
(A) 15 (B) 30 (C) 20 (D) 40
20. The heights of some children are given in the box.

Name	Height
Mahesh	78 cm
John	90 cm
Bhaskar	?
Average	84 cm

What is the height of Bhaskar ?

- (A) 168 cm (B) 84 cm (C) 78 cm (D) 90 cm

21. Which two of the figures below have a different area but same perimeter ?

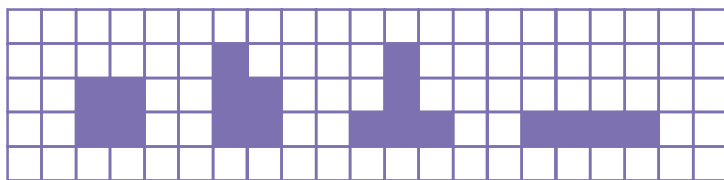


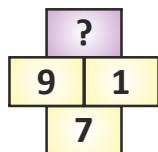
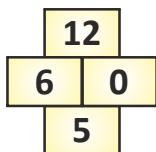
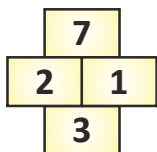
Fig A

Fig B

Fig C

Fig D

- (A) Fig A and B (B) Fig B and C
(C) Fig B and D (D) Fig C and D
22. The number of pieces of chocolate in a box is between 40 and 50. These pieces of chocolate are to be shared among 6 or 7 children. How many pieces of chocolate are there in the box ?
- (A) 40 (B) 42 (C) 44 (D) 46
23. What is the missing number ?



- (A) 8 (B) 13 (C) 3 (D) 17
24. Divide the sum of 2309 and 1453 by 6. Round off your answer to the nearest hundred.
- (A) 650 (B) 600 (C) 550 (D) 500

25. Select the fractions which is in descending order.

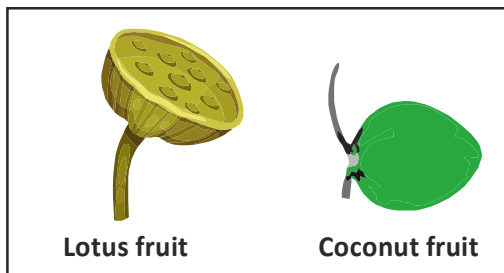
(A) $\frac{9}{10}, \frac{6}{10}, \frac{1}{2}, \frac{1}{5}$

(B) $\frac{9}{10}, \frac{6}{10}, \frac{1}{5}, \frac{1}{2}$

(C) $\frac{1}{2}, \frac{1}{5}, \frac{6}{10}, \frac{9}{10}$

(D) $\frac{1}{5}, \frac{6}{10}, \frac{1}{2}, \frac{9}{10}$

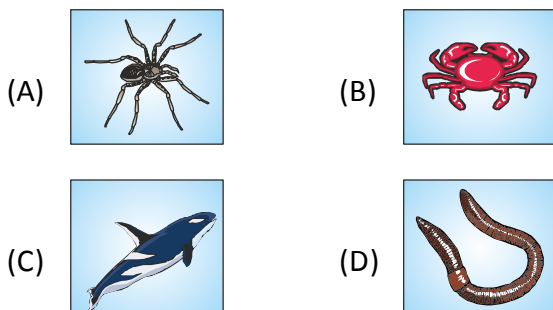
26. Look at the fruits below.



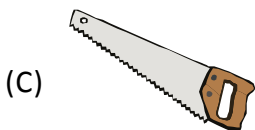
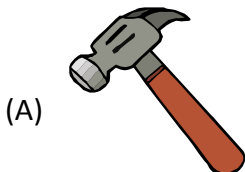
What do these fruits have in common ?

- (A) They have hooks.
- (B) They are juicy and fleshy.
- (C) They have parachute-like structures.
- (D) They have structures that enable them to float on water.

27. Which animal have backbone ?



28. Which tool is a 3rd order lever ?



29. If there is fire in the building, one should

- (A) vacate the building immediately.
- (B) go down the stair.
- (C) never use the lift.
- (D) all of these

30. Fossil fuels are not renewable. What will happen if people continue to consume these fossil fuels ?

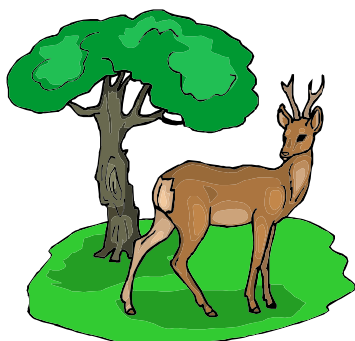
- (A) These resources will disappear.
- (B) We will need to make more fossil fuels.
- (C) Conditions will remain the same.
- (D) Cars will be able to move faster.

31. Which is both a prey and a predator in the given food chain ?

Corn → Chicken → Snake → Eagle

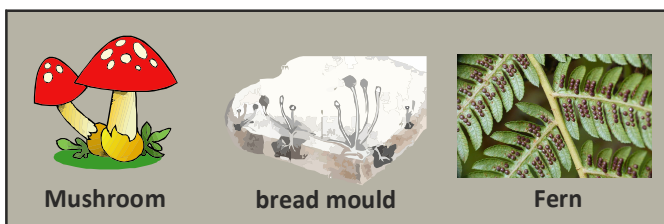
- (A) Corn
- (B) Chicken
- (C) Eagle
- (D) Snake

32. The diagram below shows a deer in a woodland environment.



In what way the deer depends on plants to survive ?

- (A) Food (B) Shelter
(C) Air (D) All of these
33. **What do these things have in common ?**



- (A) They all contain chlorophyll.
(B) They all reproduce by spores.
(C) They feed on decaying matter.
(D) They are flowering plants.

34. What do you know about the animal shown below ?



- (i) It is warm-blooded.
- (ii) It has an outer covering of hair.
- (iii) It gives birth to its young alive.
- (iv) It suckles its young.

- (A) (ii) and (iii) only (B) (iii) and (iv) only
(C) (i), (ii) and (iv) only (D) All of these

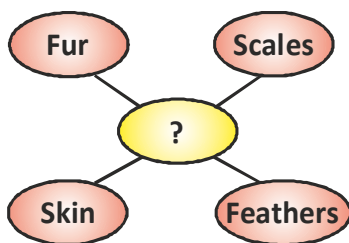
35. Which option contain animals with a backbone (vertebrates) ?

- (A) Earthworm, snake, crayfish
(B) Earthworm, snake, horse
(C) Roundworm, fish, earthworm
(D) Whale, snake, fish

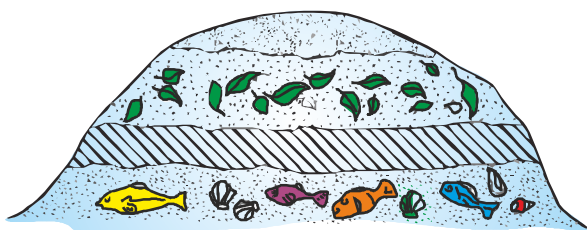
36. What does a rat use its incisors for ?

- (A) To chew food (B) To nibble food
(C) To grind food (D) To tear food

37. Which of these belongs to the empty circle ?



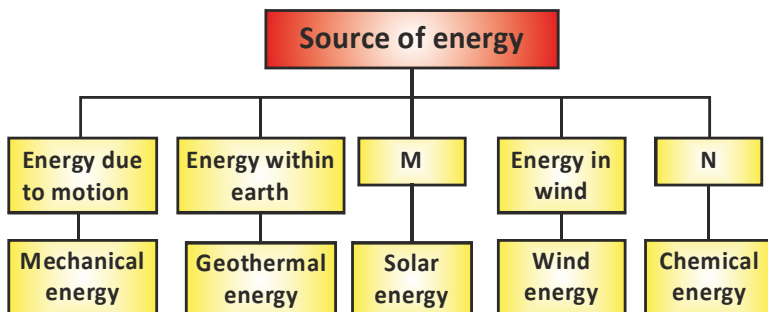
- (A) Things that cover animal bodies
 - (B) Things that make the animal smaller
 - (C) Things that keep animal bodies cool
 - (D) Things that help animal bodies get oxygen
- 38. The picture below shows four different rock layers in a hillside.**



What is the best evidence that one of these layers of rock was formed under an ocean?

- (A) The thickness of the layer
- (B) The type of fossils in the layer
- (C) The number of lines in the layer
- (D) The type of leaves in the layer

39. Study the diagrams below.



Which one of the following options will best represent M and N ?

	M	N
(A)	Biomass	Geothermal
(B)	Oil	Natural gas
(C)	Sun	Coal
(D)	Oil	Biomass

40. Which of your body systems lets you know that water is hot ?

- (A) Nervous system (B) Respiratory system
(C) Circulatory system (D) Skeletal system

41. When a lightbulb is lit, electrical energy is changed into light energy and

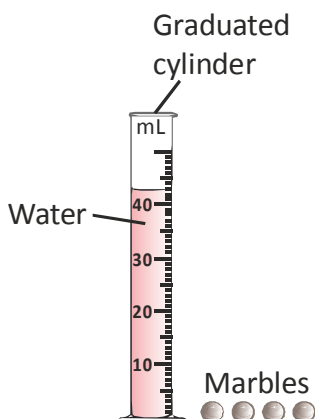
- (A) chemical energy (B) magnetic energy
(C) heat energy (D) mechanical energy

- 42. Match parts of human brain in column I with their functions in column II.**

	Column I		Column II
P.	Cerebrum	(I)	Breathing and heart beat
Q.	Cerebellum	(II)	Control movements
R.	Medulla	(III)	Control speech, memory and intelligence

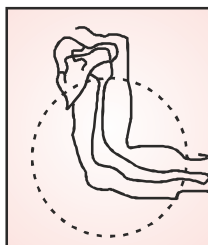
- (A) P - I, Q - II, R - III (B) P - II, Q - I, R - III
(C) P - I, Q - III, R - II (D) P - III, Q - II, R - I
- 43. A hot, boiled egg is kept into a cup of cold water. What happens to the temperature of the water and the egg ?**
- (A) The water gets colder and the egg gets warmer.
(B) The water gets warmer and the egg gets colder.
(C) The water temperature stays the same and the egg gets colder.
(D) Both the water and the egg get colder.
- 44. What most likely would happen if the frog population decreased in the food chain in a pond ?**
- (A) The grass would grow taller.
(B) The heron population would decrease.
(C) The fish population would increase.
(D) The grasshopper population would increase.

45. The diagram shows four identical marbles and a graduated cylinder containing 43 ml of water.



Which property of the marbles causes the water level to rise when they are put in the graduated cylinder ?

- (A) Colour (B) Shape (C) Texture (D) Volume
46. **Which principle of simple machines is adopted by the part of the human body shown ?**



- (A) Gears (B) Lever
(C) Wheel and axle (D) Inclined Plane

47. Which of the following best describe the importance of seed dispersal ?

- (i) To prevent overcrowding
- (ii) To increase the seedling's chances of survival
- (iii) To enable the young plant to obtain enough nutrients from the parent plant
- (iv) To allow the young plant to have the same characteristics as the parent plant

- (A) (i) and (ii) only (B) (ii) and (iii) only
(C) (i), (ii) and (iii) only (D) (i), (ii), (iii) and (iv)

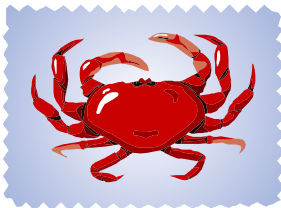
48. What is an advantage of animals living in a herd ?

- (A) Overcrowding
(B) More competition for food
(C) Competition for a mate
(D) Protection for each other

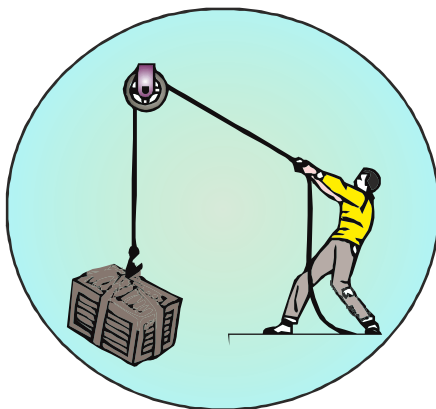
49. Which group contains ONLY reptiles?

- (A) Lizard, frog, snake (B) Turtle, lizard, crocodile
(C) octopus, snail, turtle (D) Crab, earthworm, snake

50. Crabs can be found in the coastal waters. Which of these explains why the crab's outer shell helps it survive in its habitat ?



- (A) The shell keeps the crab warm.
(B) The shell helps the crab catch food.
(C) The shell protects the crab from predators.
(D) The shell allows the crab to get oxygen.
51. The diagram below shows a person using a simple machine to lift a box.






The box is being lifted with the help of





- (A) an inclined plane (B) a magnet
(C) a pulley (D) a lever

- 52. A test is conducted to find out whether light is an essential factor for seed germination. While keeping other conditions favourable for germination, Container A is placed in a cupboard and Container B is placed near the window of a room. What would the results be?**
- (A) Only the seeds in container A will germinate.
(B) Only the seeds in container B will germinate.
(C) The seeds in both containers will germinate.
(D) The seeds in both containers will not germinate.
- 53. A block of wood and a block of steel of the same size are placed in a basin of water. The wood floats, while the steel block sinks immediately. Which of these cause a block of wood to float on water?**
- (A) Gravitational force (B) Buoyant force
(C) Chemical force (D) Frictional force
- 54. A student rubs his hands together to warm them. His hands get warm due to**
- (A) friction (B) gravity
(C) magnetism (D) sound

55. Which of these statements is supported by the information in the given chart ?

Animal	Behavior
<p>Goose</p> 	<p>A goose flies south for the winter.</p>
<p>Salamander</p> 	<p>A salamander crawls under a log in the summer.</p>
<p>Mouse</p> 	<p>A mouse runs into a hole.</p>

- (A) Different animals eat different types of food.
- (B) Some animals move in order to meet their needs.
- (C) A salamander moves slower than a mouse.
- (D) Animals depend on each other for survival.

56. Your bathroom tap is leaking and is a constant source of irritating noise. You would
- (A) sleep with pillows upon your ears.
(B) put a bucket underneath.
(C) try to put up a cork upon the mouth of the tap.
(D) call a plumber to repair the tap.
57. A special dice has a number on each face. The sum of the numbers on opposite faces are all equal. Five of the numbers are 5, 6, 9, 11 and 14. What is the number on the sixth face ?
- (A) 4 (B) 8 (C) 13 (D) 15
58. Which shape does not have a horizontal or a vertical line of symmetry ?
- (A)  (B) 
- (C)  (D) 
59. There are 42 boys in a line. Hemanth is 15th from the left and Revanth is the 16th from the right. Two more boys join the line at the left end. After this, Hemanth and Revanth interchange their position. Find Revanth's position from left.
- (A) 17 (B) 14 (C) 15 (D) 16

60. Identify the missing piece.

