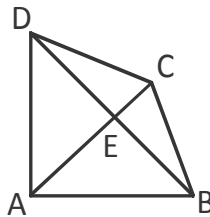
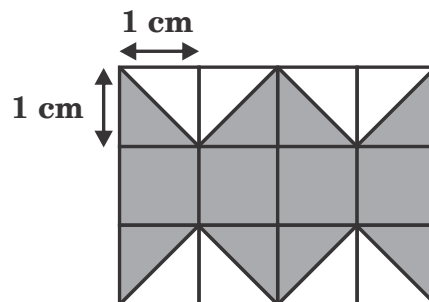


1. Which of the following is true ?
- (A) Every mixed fraction can be written as a proper fraction
 (B) Every mixed fraction can be written as an improper fraction
 (C) A proper fraction can be written as a mixed fraction.
 (D) A proper fraction can be written as an improper fraction

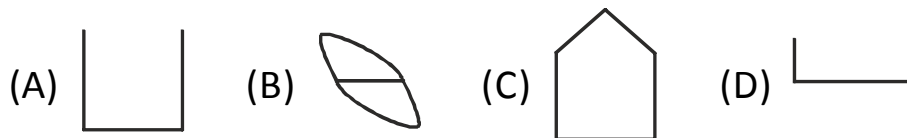
2. How many triangles are there in the given figure ?



- (A) 4 (B) 6 (C) 8 (D) 7
3. What is the area of the shaded figure ?



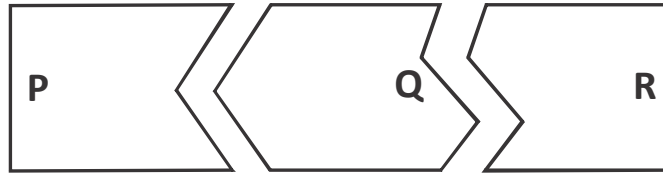
- (A) 4 cm^2 (B) 6 cm^2 (C) 8 cm^2 (D) 10 cm^2
4. Which figure is a polygon ?



5. What is the value of $x^2 + 12x + 36$ when $x = 64$?

- (A) 3000 (B) 4900 (C) 2600 (D) 5000

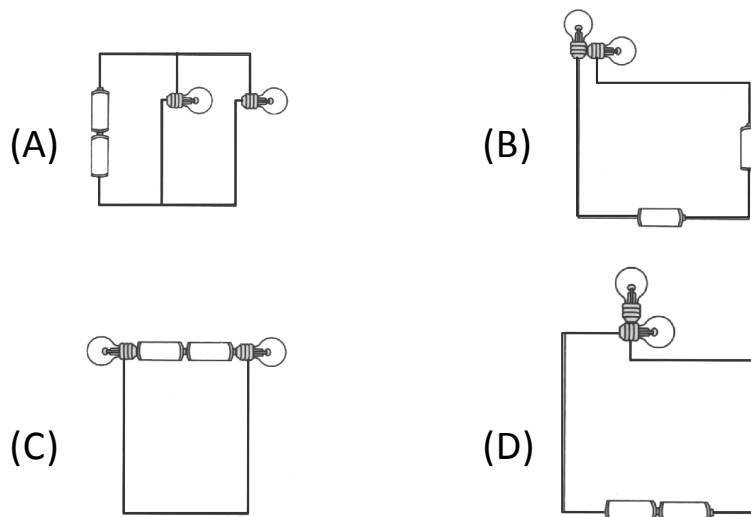
6. A magnet is broken into three pieces.



If Q is the N - pole, which one correctly shows the poles at P and R respectively ?

- (A) N - pole, S - pole (B) S - pole, N - pole
 (C) N - pole, N - pole (D) S - pole, S - pole

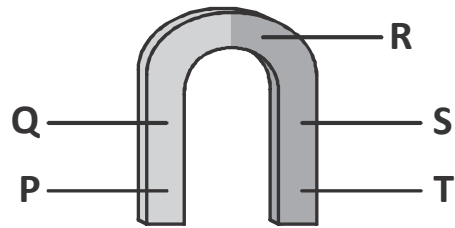
7. In which of the circuits shown below will only one bulb light up ?



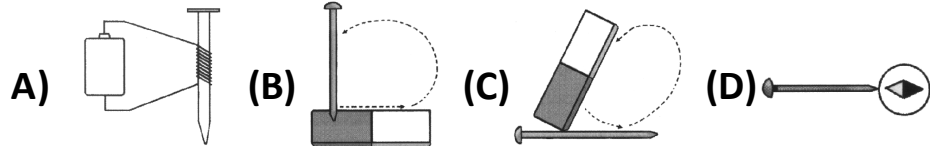
8. A cell is generally provided with a cap. The main function performed by this cap is to

- (A) seal the contents of the cell.
 (B) keep various parts of cell in their place.
 (C) act as positive terminal of the cell.
 (D) all the three.

9. Which part(s) of the magnet shown below can attract most of the paper clips ?



- (A) Only R
 (B) Only P and T
 (C) Only Q and S
 (D) Only Q, R and S
10. Which of the following are not the correct ways of making a magnet ?



- (A) A and B only
 (B) A and C only
 (C) B and D only
 (D) B, C and D only

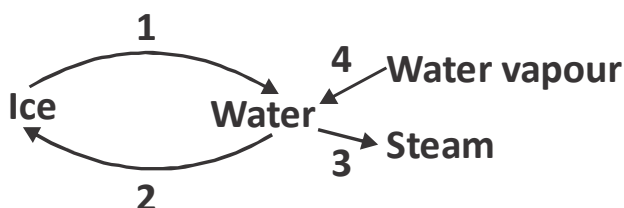
11. Read the table given below.

(A)	Does it have an atmosphere ?	Yes	Go to (B)
		No	W
(B)	Is the atmosphere mainly made up of carbon dioxide ?	Yes	Z
		No	Go to (C)
(C)	Does the atmosphere contain other gases like nitrogen, water and oxygen ?	Yes	Y
		No	X

Which one is the most suitable place for living things to survive ?

(A) X (B) Z (C) Y (D) W

12. Identify the processes based on the given flow chart.



	1	2	3	4
(A)	Freezing	Melting	Evaporation	Condensation
(B)	Melting	Freezing	Boiling	Condensation
(C)	Freezing	Melting	Boiling	Evaporation
(D)	Melting	Freezing	Evaporation	Cooling

13. Saline water is NOT used for

(A) washing clothes. (B) drinking.
(C) agriculture. (D) all the three.

14. A student conducted an experiment to observe water evaporation using different size of beakers that were placed under the same conditions. Below is the result of his experiment.

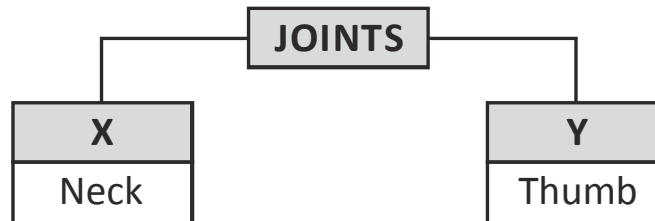
Beaker	Amount of water at the beginning	Amount of water at the end
1	100 ml	70 ml
2	90 ml	75 ml
3	80 ml	55 ml
4	70 ml	65 ml

Which one is the correct order of the surface area of the beaker from the smallest to the widest ?

- (A) 1 – 2 – 3 – 4 (B) 2 – 1 – 4 – 3
 (C) 4 – 2 – 3 – 1 (D) 3 – 4 – 1 – 2
15. In wheat flour, flour is a wanted component and unwanted component is X.
 Y is a mixture. Grain seeds is a wanted component and stalks is an unwanted component
 Identify X and Y.

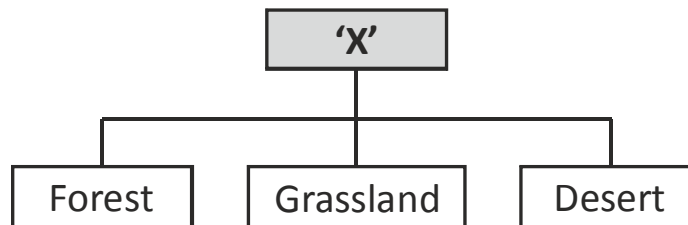
	X	Y
(A)	Husk	Cut paddy
(B)	Wheat	Husk
(C)	Husk	Sawdust
(D)	Husk	Sand

16. Identify X and Y in the given chart.



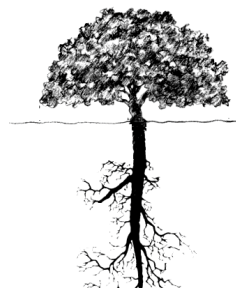
- (A) X - Gliding; Y - Pivot (B) X - Hinge; Y - Ball & Socket
 (C) X - Pivot; Y - Saddle (D) X - Ball & Socket; Y - Hinge

17. Identify 'X' in the given classification.



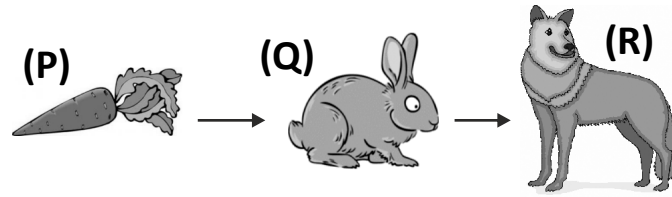
- (A) Aquatic ecosystem (B) Marine ecosystem
 (C) Terrestrial ecosystem (D) Aerial ecosystem

18. Which of these plants would have a root structure similar to one shown in the given figure ?



- (A) Maize (B) Barley (C) Paddy (D) Balsam

19. The arrow (→) in the given figures show. "This eats that". Who is the Predator ?



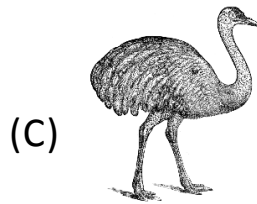
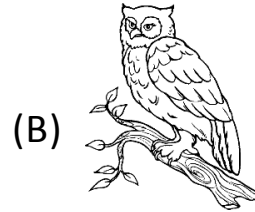
(A) Only P

(B) Only Q

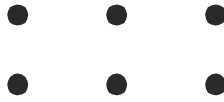
(C) P and Q

(D) Only R

20. Pick the odd one out.

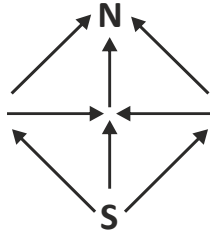


21. How many triangles can you draw using any 3 dots shown below as the vertices ?



- (A) 9 (B) 16 (C) 18 (D) 24

22. Between S and N all are one-way roads. How many different ways can Kiran drive from S to N ?



- (A) 3 (B) 4 (C) 5 (D) 6

23. You are a participant in a race. You pass the person in second place. What position are you in ?

- (A) First (B) Third (C) Second (D) Fourth

24. 50 marbles are to be put into 8 boxes. So that each box has atleast 1 marble. What is the maximum number of marbles can be put in a box ?

- (A) 8 (B) 32 (C) 43 (D) 7

25. Moni's mother has four children. The first child is called April. The second May. The third is June. What is the name of the fourth child ?

- (A) July (B) August
(C) March (D) None



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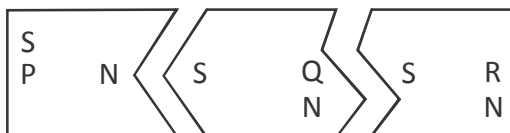
Solutions for Class : 6

MATHEMATICS

1. (B) A mixed fraction can be written as an improper fraction.
2. (C) $\Delta ABE, \Delta BEC, \Delta ABC, \Delta AED, \Delta EDC, \Delta ACD, \Delta ABD, \Delta BCD$ are there
3. (C) Shaded area = Total area – unshades area
 $= 4 \times 3 \text{ cm}^2 - 8 \times \frac{1}{2} \times 1 \times 1 \text{ cm}^2$
 $= 12 \text{ cm}^2 - 4 \text{ cm}^2 = 8 \text{ cm}^2$
4. (C) Except 'C' option remaining are not polygons.
5. (B) $x^2 + 12x + 36 = (x+6)^2$
 $\therefore x = 64 \quad x + 6 = 64 + 6 = 70$
 $\therefore (x+6)^2 = 70^2 = 4900$

PHYSICS

6. (B) If Q is the north pole, the poles at P and R are south pole and north pole respectively as shown below :



7. (D) All the bulbs must have their metal tip and metal casing connected to the other components in the circuit in order to light up. In option (D), the bulb at the top does not have its metal casing connected to the rest of the circuit, so electric current cannot flow through it to light it up.

8. (C) All the given functions are performed by the cap of a cell. The main function of a cap of a cell is to act as a positive terminal.
9. (B) P and T are unlike poles in a horse-shoe magnet that attract most of the paper clips.
10. (C) Figures shown in options (B) and (D) are not the correct ways of making a magnet.

CHEMISTRY

11. (C) 'W' does not have an atmosphere, so it is not a suitable place for living things to survive as living things need air to breathe. X has no oxygen, so it is not a suitable place for living things to survive as they need to respire. As Y has oxygen for respiration and contains water, it is a suitable place for living things to survive. Oxygen makes up 21% of the air on the Earth. As Z has an atmosphere that is mainly made of carbon dioxide, it is not a suitable place for living things to survive.
12. (B) Following are the correct processes:
 Change of ice to water - melting
 Change of water to ice - freezing
 Change of water to steam - boiling
 Change of water vapour to water - condensation
13. (D) Saline water is hard due to dissolved salts in it. Therefore, it is not used for the given purposes.

14. (C) The rate of water evaporation (how fast liquid evaporates) depends on how wide the surface area is. The wider the surface area the quicker the evaporation process will take place, which is shown by the more amount of water lost in the beaker.
15. (A) In wheat flour, flour is the wanted component while husk (X) is the unwanted component. When cut paddy (Y) stalks are beaten on a stone, the grain seeds separate from their stalks.

BIOLOGY

16. (C) Neck joint is pivot joint and thumb joint is saddle joint.
17. (C) In the given classification 'X' is terrestrial ecosystem.

18. (D) Balsam is a dicot have taproot system.
19. (D) Animals that hunts and kills its prey (animals) are called predators.
20. (D) Bat is a mammal. Hen, Owl and Ostrich are birds.



CRITICAL THINKING

21. (C)
22. (C)
23. (C)
24. (C)
25. (D)