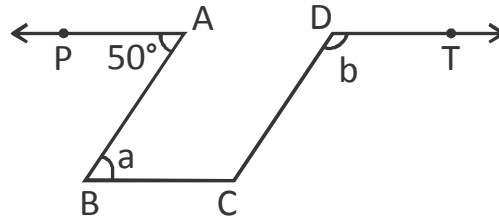
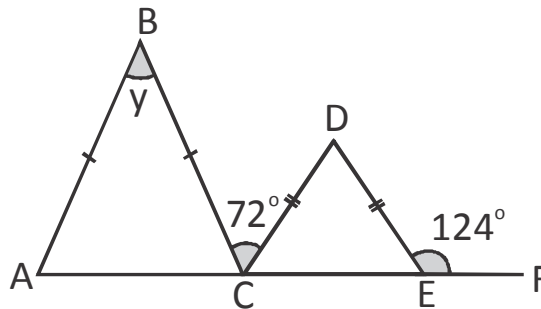


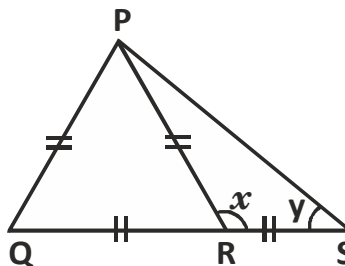
1. In the given figure, $PA \parallel BC \parallel DT$ and $AB \parallel DC$. Then, the values of a and b are respectively.



- (A) $60^\circ, 120^\circ$ (B) $50^\circ, 130^\circ$
 (C) $70^\circ, 110^\circ$ (D) $80^\circ, 100^\circ$
2. Triangles ABC and CDE are isosceles triangles. ACEF is a straight line. Find the value of y .

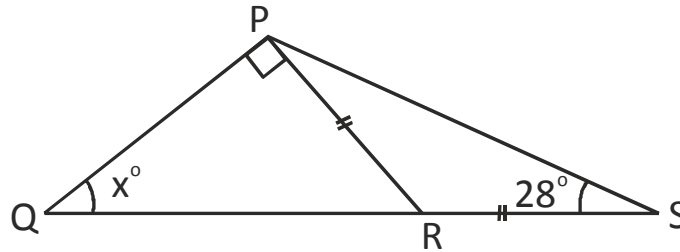


- (A) 52° (B) 58° (C) 68° (D) 76°
3. Find the measure of y in the given figure.



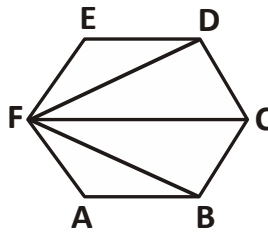
- (A) 30° (B) 60° (C) 90° (D) 120°

4. What is the measure of x ?



- (A) 14 (B) 28 (C) 34 (D) 44

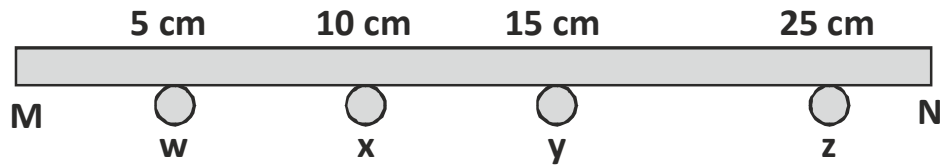
5. A regular hexagon is divided into four triangles.



Which of the following is correct ?

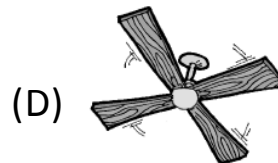
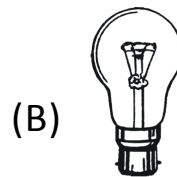
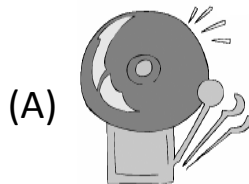
- (A) ABF EDF (B) FDC FCB
(C) ABF FBC (D) FDC BCF

6. Given below is a metal rod. 4 drops of wax, w, x, y and z are placed at the distance of 5 cm, 10 cm, 15 cm and 25 cm respectively from the end M.

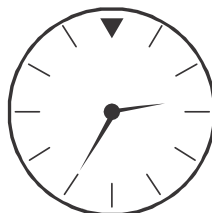


When heated from the end M, drop w fall off first in 2 minutes time. What will be the time taken for the drops x, y and z to fall in minutes ?

- (A) 4, 6, 10 (B) 3, 9, 12
(C) 5, 10, 15 (D) 6, 12, 18
7. Which of the following electrical appliances does NOT use the magnetic effects of current?



8. The given figure shows the image of a clock as seen in a plane mirror. The correct time is



- (A) 2.25. (B) 2.35. (C) 6.45. (D) 9.25.

9. **A hot air balloon rises up because**
- (A) the special fabric of the balloon is lighter than air.
 - (B) hot air is less dense than the cooler air which surrounds it.
 - (C) wind blows into the balloon and lifts it up.
 - (D) the flame produces smoke which lifts the balloon.
10. **Which option is correct for all heat transfers?**

	Conducted	Convection	Radiation
(A)	No medium is required	Through solids only	Through liquids and gases
(B)	Through liquids and gases	No medium is required	Through solids only
(C)	Through solids only	Through liquids and gases	No medium is required
(D)	Through solids only	No medium is required	Through liquids and gases

11. Which of the following is a physical change ?
- (A) The rusting of iron nails
 - (B) The burning of diesel
 - (C) Breaking of a glass bottle
 - (D) The heating of iron with sulphur
12. What causes convection currents in air ?
- (A) The revolution of the earth around the sun
 - (B) The rotation of the earth around itself
 - (C) The heat on the surface of the earth
 - (D) Conversion of solid to gas directly
13. Read the following statements and answer:
- I. Ozone protects us from sun's harmful radiations.
 - II. Ozone absorbs the UV radiations from the sun and breaks down to oxygen
 - III. Oxygen acts as a protective shield.
- (A) Statement I and II are correct, but III is false.
 - (B) Statement I and II are false, but III is correct.
 - (C) Statement I is true, II and III are false.
 - (D) All are correct statements.

14. Which of the following word equations represents neutralisation ?
- (A) Sodium hydroxide + hydrochloric acid \rightarrow sodium chloride + water
- (B) Calcium carbonate \rightarrow calcium oxide + carbon dioxide
- (C) Hydrogen + oxygen \rightarrow water
- (D) Methane + oxygen \rightarrow carbon dioxide + water
15. Sohail's teacher asked to identify the correct order of the processes listed below to purify water and make it safe for drinking.

- (i) Filtration
(ii) Sedimentation
(iii) Chlorination
(iv) Addition of chemicals

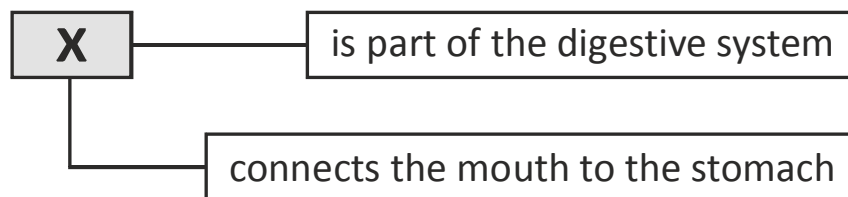
Which of the following is the correct order that Sohail arranged ?

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





16. Which of these characteristic features hold true about the figure given below ?



- (A) It has pitfall traps that contain digestive enzymes.
 (B) It is able to suck in the prey with a vacuum-like trap.
 (C) Its leaves are pigmented to lure the insects.
 (D) All of these
17. Study the concept map below. What is 'X' ?



- (A) Oesophagus (B) Windpipe
 (C) Small intestine (D) Large intestine
18. Identify the correct pair.

- (A)  – Diffusion (B)  – Flame cell
 (C)  – Nephridia (D)  – Malpighian

19. Show the correct path of digestion.



- (A) E → C → B → A → D
- (B) C → E → B → D → A
- (C) C → B → E → A → D
- (D) B → E → C → D → A

20. The diagram below shows how carbon dioxide is given out or taken in during the processes, P, Q and R.



Which of the following correctly identify the processes, P, Q and R ?

	P	Q	R
(A)	Respiration	Photosynthesis	Respiration
(B)	Respiration	Respiration	Photosynthesis
(C)	Photosynthesis	Respiration	Photosynthesis
(D)	Photosynthesis	Photosynthesis	Respiration

21. Carl, Dylan and Edmund are best friends. Only one of them knows how to drive.

Carl: I can drive.

Dylan: I do not know how to drive.

Edmund: Carl does not know how to drive !

Only one of them is telling the truth. Who can drive ?

- (A) Carl (B) Edmund
(C) Dylan (D) All are lying

22. Arrange the following words in a meaningful order.

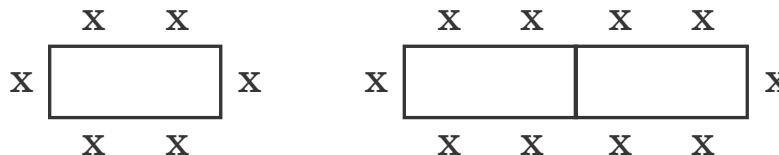
1. Family	2. Community
3. Member	4. Locality
	5. Country

- (A) 3, 1, 2, 4, 5 (B) 3, 1, 2, 5, 4
(C) 3, 1, 4, 2, 5 (D) 3, 1, 4, 5, 2

23. Choose the word that is necessary part of the word 'LANGUAGE'.

- (A) Tongue (B) Slang (C) Writing (D) Words

24. A group of people go to a restaurant for a dinner. They requested to be seated at the same table. The restaurant has only rectangular tables that can be joined end to end to form a large, long table. Study the figure given below.



How many people can be seated if there are 20 tables ?

- (A) 60 (B) 94 (C) 82 (D) 76

