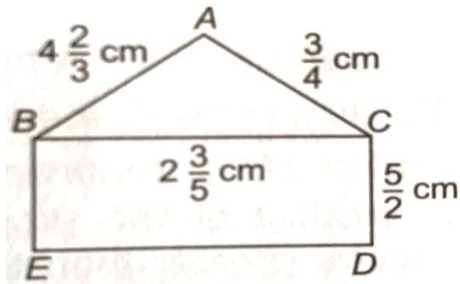


Subject: Maths

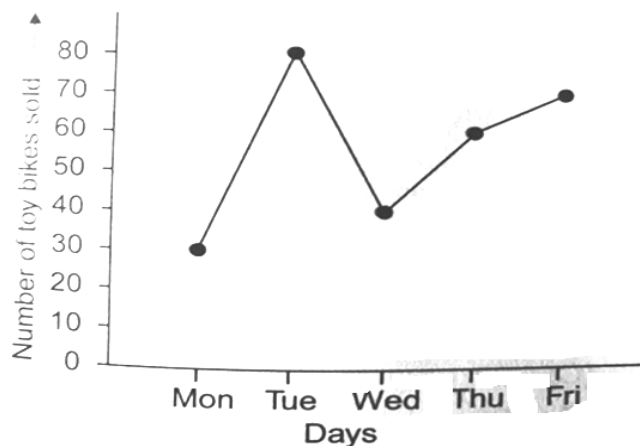
Q1. Multiple choice questions:

1. Which of the following statements is correct?
 - a) All natural numbers are whole numbers and all whole numbers are integers.
 - b) All whole numbers are integers and all integers are natural numbers.
 - c) All integers are whole numbers and all natural numbers are integers.
 - d) All integers are whole numbers and all integers are natural numbers.
2. Find the perimeter of:
 - (i) ΔABC
 - (ii) Rectangle BCDE



- | | |
|----------------------|--------------------|
| (i) | (ii) |
| a) $8\frac{1}{60}cm$ | 5cm |
| b) 5cm | $10\frac{1}{60}cm$ |
| c) $8\frac{1}{60}cm$ | $10\frac{1}{5}cm$ |
| d) 8cm | 23cm |

3. The given line graph show the number of toy bikes sold by Robin over 5 days. If the cost of 1 toy is Rs. 33.60, then how much did he earn in 5 days?



- | | | | |
|-------------|--------------|--------------|--------------|
| a) Rs. 9408 | (b) Rs. 9240 | (c) Rs. 8400 | (d) Rs. 8408 |
|-------------|--------------|--------------|--------------|

4. Which of the following equations has $y = 3\frac{9}{11}$ as a solution?

- | | |
|---|--|
| a) $5y + \frac{5}{3} = \frac{47}{3} + \frac{4y}{3}$ | (c) $5y - \frac{5}{3} = \frac{47}{3} - \frac{4y}{3}$ |
| b) $5y - \frac{5}{3} = \frac{47}{3} + \frac{4y}{3}$ | (d) None of these |

5. Match the following:

Column-I

Column-II

- | | |
|---|--------|
| (i) Arjun's father's age is 5 years more than four times Arjun's age. Find Arjun's age (in years), if his father is 37 years old. | (p) 9 |
| (ii) Ramesh says that he has 8 notebooks more than four times the number of notebooks Anuj has. Ramesh has 48 notebooks. How many notebooks does Anuj have? | (q) 8 |
| (iii) Varun says that he has 11 erasers more than five times the number of erasers Sameer has. Varun has 56 erasers. How many erasers does Sameer have? | (r) 10 |

- a) (i) → (q), (ii) → (p), (iii) → (r)
 b) (i) → (q), (ii) → (r), (iii) → (p)
 c) (i) → (p), (ii) → (q), (iii) → (r)
 d) (i) → (p), (ii) → (r), (iii) → (q)

6. One-fourth of a pole is painted red, two-fifth is painted blue and the remaining 21m is painted green. Find the height of the pole.

- a) 40m (b) 60m (c) 80m (d) 90m

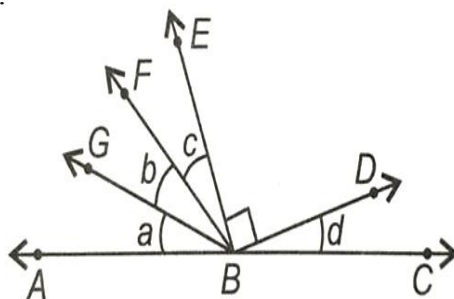
7. The value of $\frac{3^4}{2^3} + \frac{\left(\frac{1}{9} \times 4\right)^2}{\left(\frac{-1}{3}\right)^3 \div \left(\frac{1}{2}\right)^3}$ is

- a) $\frac{81}{24}$ (b) $\frac{259}{24}$ (c) $\frac{81}{8}$ (d) $\frac{259}{8}$

8. If $(2^{4a-3} + 10) \div 6 = 7$, then a = _____

- a) -1 (b) 0 (c) 1 (d) 2

9. In the given figure (not drawn to scale), ABC is a straight line, $\angle DBE$ is a right angle and $\angle a = \angle b = \angle c = \angle d$. Find $\angle a$.



- a) 22.5° (b) 30° (c) 45° (d) 60°

10. Which of the following options holds?

Statement-1: If two lines intersect, then the vertically opposite angles are equal.

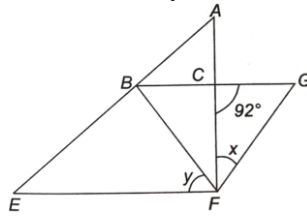
Statement-2: Sum of all the angles around a point is 180° .

- a) Both statement-1 and statement-2 are true.
 b) Statement-1 is true but statement-2 is false.
 c) Statement -1 is false but statement-2 is true.
 d) Both statement-1 and statement-2 are false

11. In a ΔPQR , which of the given conditions does not hold?

- a) $PQ + QR > PR$ (b) $PQ - PR < QR$ (c) $PQ - QR > PR$ (d) $RQ + PR > PQ$

12. In the figure (not drawn to scale), EFA is a right-angled triangle with $\angle EFA = 90^\circ$ and FGB is an equilateral triangle, find the value of $y - 2x$.

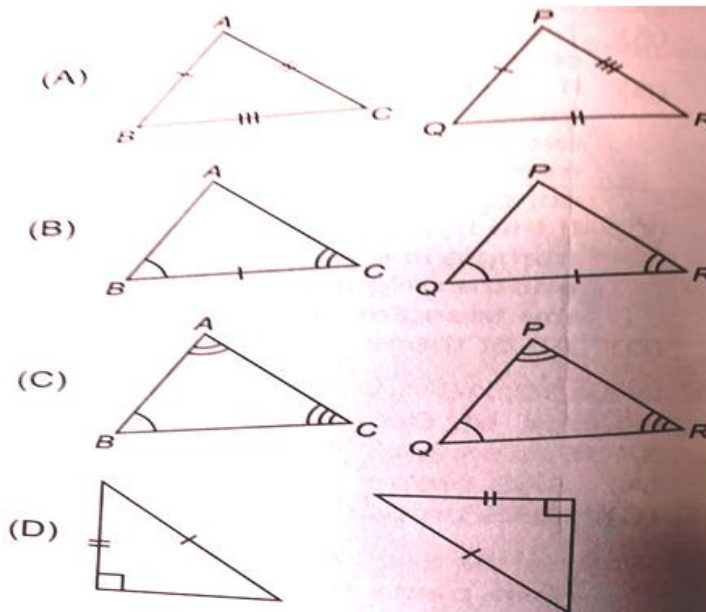


- a) 2° (b) 8° (c) 17° (d) 20°

13. Which of the following statements is incorrect?

- a) Two triangles having same area are congruent.
 b) If two sides and one angle of a triangle are equal to the corresponding two sides and the angle of another triangle, then the two triangles are congruent.
 c) If the hypotenuse of one right angled triangle is equal to the hypotenuse of another right angled triangle, then the triangles are congruent.
 d) All of these

14. Which of the following triangles are not congruent to each other?



15. Which of the following statements is correct?

- a) In an isosceles triangle, the angles opposite to equal sides are equal.
 b) The bisector of the vertical angle of an isosceles triangle bisects the base at right angles.
 c) If the hypotenuse and an acute angle of one right angled triangle is equal to the hypotenuse and the corresponding acute angle of another triangle, then the triangles are congruent.
 d) All of these.

16. Mini purchased a dozen handkerchiefs for Rs. 60 and sold them for Rs. 84 whereas Trishika purchased a dozen handkerchiefs for Rs. 90 and sold them for Rs. 150. Whose profit percent is more and by how much?

- a) Mini, 23.4% (b) Trishika, 25.4% (c) Trishika, 26.6% (d) Mini, 31.6%

17. Match the following:

Column-I

- (i) Arun sells a car to his friend Amit at 10% loss. If Amit sells the car for Rs. 54000 and gains 20%, Then the original C.P. of the car (in Rs.) was
 (ii) A person borrowed Rs. 500 at 3% per annum S.I.

Column-II

- (p) 125
 (q) 11200

and Rs. 600 at $4\frac{1}{2}\%$ per annum on the agreement

- (iii) A certain amount was divided between A and B in the ratio 4 : 3. If B's share was Rs. 4800, then the total amount (in Rs.) is. (r) 50000

- a) (i) → (r), (ii) → (p), (iii) → (q)
 b) (i) → (p), (ii) → (q), (iii) → (r)
 c) (i) → (q), (ii) → (p), (iii) → (r)
 d) (i) → (r), (ii) → (q), (iii) → (p)

18. For any two numbers x and y which of the following relation is/are correct, if x is positive and y is negative?

- (i) $x < y$ (ii) $x = y$ (iii) $x > y$
 a) both (i) and (ii) (b) both (ii) and (iii) (c) only (iii) (d) (i), (ii) and (iii)

19. Select the incorrect option:

- a) $\frac{-3}{7} > \frac{-3}{5}$ (b) $-9\frac{2}{3} > -9\frac{4}{5}$ (c) $-11\frac{1}{4} < -11\frac{3}{5}$ (d) $-13\frac{1}{3} < -13\frac{1}{5}$

20. Study the following statements carefully and select the correct option:

Statement -1: Number 0 is neither a positive nor a negative rational number.

Statement -2: There are infinite rational numbers between any two rational numbers.

- a) Both statement-1 and statement -2 are true.
 b) Statement -1 is true but statement-2 is false.
 c) Statement-1 is false but statement-2 is true.
 d) Both statement-1 and statement -2 are false.

21. Which of the following set of lengths could be the lengths of the sides of a right angled triangle?

- a) 3cm, 4cm, 6cm (c) 1.5cm, 3.6cm, 3.9cm
 b) 9cm, 16cm, 26cm (d) 7cm, 24cm, 26cm

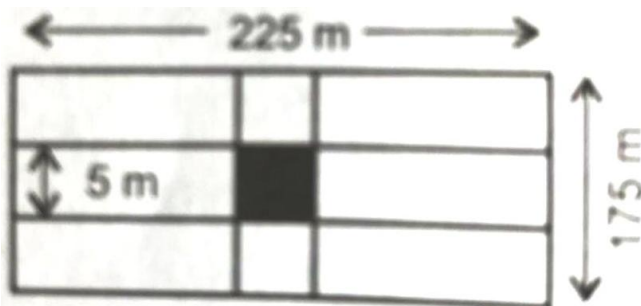
22. Study the following statements and select the correct option:

P: Only those angles which are the multiples of 15° can only be constructed using ruler and compass.

Q: We can construct an isosceles triangle in which length of its equal sides is 8.4cm and angle between them is 90° .

- a) Both P and Q are true (c) P is true but Q is false
 b) Both P and Q are false (d) P is false but Q is true

23. A field is 225m long and 175m wide. It has two roads in its centre of uniform width of 5m, one parallel to its length and the other parallel to its breadth. Find the cost of levelling the roads at Rs. 3 per square metre.



- a) Rs. 1975 (b) Rs. 1125 (c) Rs. 5925 (d) Rs. 6125

24. A rectangular field is 112m long and 100m wide. Two roads, each 3m wide are to be constructed at the centre of this field. One is parallel to the length of the field and the other is parallel to the breadth of the field. Find:

- (i) Area of the part of the field not covered by the roads.
 (ii) Cost of constructing the road at Rs. 17 per m^2 .

- (i) (ii)
 a) $3245m^2$ Rs. 2890
 b) $10573m^2$ Rs. 10659

- c) $16582m^2$
d) $10573m^2$

Rs. 20480

Rs. 1250

25. The value of $(-5x^2y) \times \left(-\frac{2}{3}xy^2z\right) \times \left(\frac{8}{15}xyz^2\right) \times \left(-\frac{1}{4}z\right)$ is _____

- a) $-\frac{4}{9}x^4y^4z^4$ (b) $\frac{4}{9}x^4y^4z^4$ (c) $-\frac{4}{9}x^3y^3z^3$ (d) $\frac{4}{9}x^3y^3z^3$

26. In addition and subtraction of two integers, sign of the answer depends upon

- a) Smaller number (b) Their difference (c) Their sum (d) Greater numerical value

27. Sum of two negative number is always

- a) Positive (b) Negative (c) 0 (d) 1

28. Sum of two Positive number is always

- a) Negative (b) Positive (c) 1 (d) 0

29. Sum of -36 and 29 is

- a) -65 (b) 65 (c) -7 (d) 7

30. Sum of -19 and -21 is

- a) -40 (b) 40 (c) 2 (d) -2

31. Which of the following statement is false:

- a) $-7 + (-6) = -13$ (b) $-5 + 1 = 4$ (c) $2 + (-1) = 1$ (d) $8 + (-9) = -1$

32. The pair of integers whose sum is -5

- a) $1, -4$ (b) $-1, 6$ (c) $-3, -2$ (d) $5, 0$

33. What integers or number should be added to -5 to get 4

- a) 1 (b) -1 (c) -9 (d) 9

34. What will be the additive inverse of -5

- a) -6 (b) -4 (c) 3 (d) 5

35. What will be the additive inverse of 7

- a) -7 (b) -6 (c) -5 (d) -4

36. Predecessor of -9 is

- a) -8 (b) 8 (c) -10 (d) 10

37. Successor of -1 is

- a) -2 (b) 0 (c) 1 (d) 2

38. The value of $6 - (-3)$ is

- a) 3 (b) -9 (c) -3 (d) 9

39. The value of $26 - 30$ is equal to

- a) 4 (b) -4 (c) -56 (d) 56

40. Which of the following statement is true

- a) $7 - 4 = 4 - 7$ (b) $7 - 4 > 4 - 7$ (c) $7 - 4 < 4 - 7$ (d) $7 - 4 = -3$

Subject: S.St

Q1. Choose the correct Answer:

1. Which is the process through which water continuously changes its form?

- (a) Water cycle (b) Food cycle (c) Rain (d) All of these

2. Which water is salty?

- (a) River water (b) Pond water (c) Rain water (d) Sea water

3. Which one of the following is an artificial enclosure for keeping small house plants?

- (a) Terrarium (b) Thermosphere (c) Climate (d) Evaporation

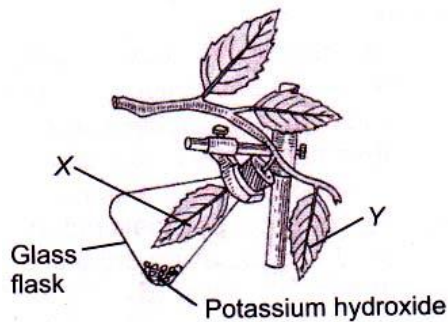
4. Weather changes
 - (a) week after week
 - (b) day after day
 - (c) within a short period
 - (d) in any of the above time period
5. Rainfall is measured by
 - (a) rain gauge
 - (b) water level increase in ponds
 - (c) water level increase in water table
 - (d) none of these
6. What does Taiga mean in Russian language?
 - (a) Terrible
 - (b) Impure
 - (c) Pure
 - (d) Hard
7. Where are Savannah grasslands located?
 - (a) Africa
 - (b) America
 - (c) Amazon
 - (d) Brazil
8. The natural conditions for selection of an ideal site are
 - (a) favourite climate
 - (b) availability of water
 - (c) suitable land
 - (d) all of these
9. In which environment do people build slanting roofs of their houses?
 - (a) Heavy rainfall
 - (b) Bright sun light
 - (c) Heavy cold
 - (d) None of these
10. In which of the following settlements are the people engaged in activities like fishing, agriculture, craftwork etc.?
 - (a) Rural settlements
 - (b) Urban settlements
 - (c) Forestry settlements
 - (d) None of these
11. Who was the first slave king of Delhi Sultanate?
 - (a) Qutbuddin Aybak
 - (b) Iltutmish
 - (c) Raziyya Sultan
 - (d) Alauddin Khalji
12. Who was successor of Muhammad-bin Tughluq?
 - (a) Ghiyasuddin Tughluq
 - (b) Firuz Shah Tughluq
 - (c) Ibn Battuta
 - (d) None of these
13. What was the language of administration under the Delhi Sultans?
 - (a) Urdu
 - (b) Persian
 - (c) Hindi
 - (d) English
14. The position of standing facing Mecca during namaj is known as
 - (a) Khutba
 - (b) Qibla
 - (c) Sijdah
 - (d) Kharaj
15. Which ruler was insulted by Aurangzeb?
 - (a) Man Singh
 - (b) Rana Pratap
 - (c) Shivaji
 - (d) All of these
16. The salary of the Mansabdars was called
 - (a) mansab
 - (b) jat
 - (c) jagi
 - (d) zabt
17. Who was Akbars Revenue minister?
 - (a) Todar Mai
 - (b) Birbal
 - (c) Abul Fazl
 - (d) Tansen
18. When persons are treated unequally what is violated?
 - (a) Dignity
 - (b) Religion
 - (c) Caste
 - (d) Practice
19. The Indian constitution recognises
 - (a) all people are equal
 - (b) all people are not equal
 - (c) all people are economically sound
 - (d) none of these
20. Who drafted the Indian Constitution?
 - (a) Pt. J.L. Nehru
 - (b) Mahatma Gandhi
 - (c) Lai Bahadur Shastri
 - (d) Dr. B.R. Ambedkar

21. Who becomes the Chief Minister?
 (a) Leader of winning party (b) Leader of losing party
 (c) Prime Minister of the country (d) President of the country
22. Who is the head of a Legislative Assembly?
 (a) Minister (b) MLA (c) Chief Minister (d) All of these
23. Who is responsible for medical services?
 (a) Transport Minister (b) Police Inspector (c) Education Minister (d) Health Minister
24. Which is the main source of income of media?
 (a) Advertisements (b) Articles (c) General news (d) None of these
25. On which basis are the cost of advertisement set?
 (a) Popularity of channel (b) Popularity of product (c) Both (a) and (b) (d) None of these
26. Constitution of a nation contains:
 (a) Rules (b) Laws (c) Both (a) and (b) (d) None of these
27. What refers to a goal or a principle in its most excellent or perfect form?
 (a) Arbitrary (b) Ideal (c) Polity (d) None of these
28. What kind of role citizens of India play in electing representatives?
 (a) Indirect (b) No Role (c) Direct (d) Submissive
29. What refers to independent people in a democratic form of government?
 (a) Sovereign (b) Ideal (c) Polity (d) Trafficking
30. If a 13-year old child is working in a factory, what is it called?
 (a) Freedom to education (b) Child labour (c) Both (a) and (b) (d) None of these
31. Which of the following was NOT the Presidency ?
 (a) Bengal (b) Madras (c) Bombay (d) Kalikata
32. Tipu Sultan stopped export through his kingdom in
 (a) 1764 (b) 1772 (c) 1785 (d) 1790
33. Haidar Ali was the ruler of
 (a) Bengal (b) Delhi (c) Bombay (d) Mysore
34. European trading companies were attracted to India due to
 (a) cheap land (b) cheap labour
 (c) raw material like cotton silk and spices (d) none of these
35. Competition among the companies resulted in
 (a) reduced profits of companies (b) quality of goods increased
 (c) price became low (d) none of these
36. The basis of classification of resources are
 (a) level of development and use (b) origin
 (c) stock and distribution (d) all of these

37. The resources whose quantities are known, named as
 (a) potential resources (b) actual resources (c) stock (d) all of these
38. Give an example of biotic resources.
 (a) rocks (b) minerals (c) soils (d) animals
39. Coal is an example of
 (a) renewable resources (b) non-renewable resources
 (c) human resources (d) potential resources
40. Question 15. How can we prevent water related diseases?
 (a) By using pond water (b) By using clean and safe water
 (c) By using boring water (d) All of these

Subject: Science

1. Priyanka took a de-starched potted plant and setup an experiment as shown in the figure. She left the plant in sunlight for few hours and then tested the leaves X and Y for starch. Leaf X did not give starch test while leaf Y showed presence of starch.



What is proved by this experiment?

- (a) Chlorophyll is necessary for photosynthesis.
 (b) Carbon dioxide is necessary for photosynthesis.
 (c) Light is necessary for photosynthesis
 (d) Oxygen is given out during photosynthesis
2. Refer to the given table

Food material	Place of digestion	Digestive enzyme
Starch	P	Salivary amylase
Protein	Stomach	Q
Fat	R	Lipase

Select the option which correctly identifies P, Q and R

- | P | Q | R |
|-------------|----------|-----------------|
| (a) Mouth | Pepsin | Small intestine |
| (b) Mouth | Trypsin | Small intestine |
| (c) Stomach | Pepsin | Small intestine |
| (d) Mouth | Trypsin | Stomach |

3. Read the given statements and select the correct option

Statement 1: Woolen clothes lock in the heat and provide us warmth in cold weather.

Statement 2: Woolen fibres trap air in the pockets formed between the individual fibres

- (a) Both statements 1 and 2 are true and statement 2 is the correct explanation of statement 1
- (b) Both statements 1 and 2 are true but statement 2 is not the correct explanation of statement 1.
- (c) Statement 1 is true but statement 2 is false
- (d) Both statements 1 and 2 are false

4. Swati takes X fabric and burns it. She observes following properties of the fabric:

- (i) It burns but does not melt.
- (ii) It shrinks from the flame
- (iii) It leaves residue after burning which is black, hollow, irregular bead that can be easily crushed to a gritty black powder.
- (iv) It is self extinguishing

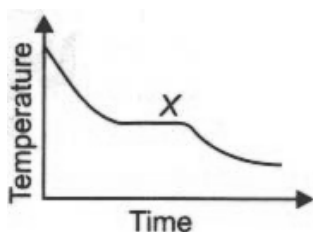
According to her observation, X could be:

- (a) Silk
- (b) Jute
- (c) Cotton
- (d) Nylon

5. Two steel balls P and Q have same readings when measured by thermometers of Celsius readings and Fahrenheit readings respectively. Then,

- (a) Ball P has greater temperature than ball Q
- (b) Ball P has lower temperature than ball Q
- (c) Both the balls P and Q have same temperature
- (d) None of these

6. A hot liquid is carefully poured into a beaker. The graph shows how its temperature changes as it cool towards room temperature. Which process(es) is/are taking place at region X?



- (a) Boiling and evaporation
- (b) Condensation only
- (c) Evaporation only
- (d) Solidification and evaporation

7. Radhika took warm water in a beaker and put few China rose petals in it. She kept the petals dipped for some time till the water became coloured. Then she put few drops of this coloured water into the solutions (i) – (iv)

- (i) Amla juice
- (ii) Lime water
- (iii) Common salt solution
- (d) Baking soda solution

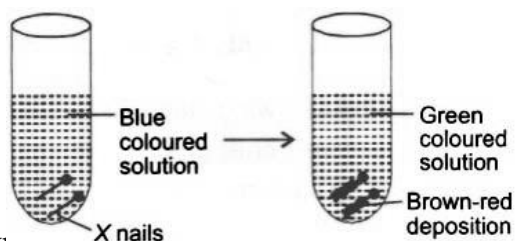
What changes would she observe in the colour of China rose solution?

- | | (i) | (ii) | (iii) | (iv) |
|-----|---------|--------|--------|--------|
| (a) | Magenta | Green | Pink | Green |
| (b) | Red | Yellow | Yellow | Red |
| (c) | Red | Red | Yellow | Yellow |
| (d) | Magenta | Yellow | Pink | Yellow |

8. Raghu used excessive chemical fertilizers in his field while the soil in Raman's field was found to be basic in nature. What should they add to their fields to improve the quality of the soil?

- (a) Raghu : Organic matter
 Raman : Quick lime
- (b) Raghu : Quick lime
 Raman : Organic matter
- (c) Both should add quick lime
- (d) Both should add organic matter

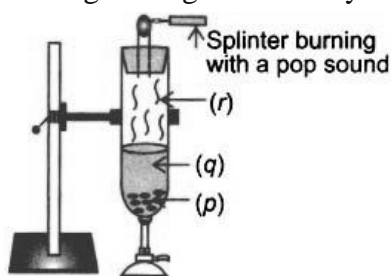
9. Study the given figure carefully.



Which of the following reactions explains the above change most appropriately?

- (a) $\text{ZnSO}_4 + \text{Cu} \longrightarrow \text{CuSO}_4 + \text{Zn}$
- (b) $\text{CuSO}_4 + \text{Fe} \longrightarrow \text{FeSO}_4 + \text{Cu}$
- (c) $\text{FeSO}_4 + \text{Cu} \longrightarrow \text{CuSO}_4 + \text{Fe}$
- (d) $\text{CuSO}_4 + \text{Zn} \longrightarrow \text{ZnSO}_4 + \text{Cu}$

10. Observe the given figure carefully and identify the substances marked as (p), (q) and (r).



- (a) Zinc Water Carbon dioxide
- (b) Magnesium Hydrochloric acid Oxygen
- (c) Magnesium Water Carbon dioxide
- (d) Zinc hydrochloric acid Hydrogen

11. Rita categorized different animals on the basis of their habitat. She made three groups of three animals each. By mistake, she put one wrong member in each group. Identify it and select the correct option.

Group I: Penguin, Musk ox, Kangaroo rat

Group II: Rattle snake, Fennec fox, Reindeer

Group III: Toucan, Macaw, Camel

- (a) Musk ox of group I should be interchanged with camel of group III.
- (b) Kangaroo rat of group I should be interchanged with reindeer of group II.
- (c) Penguin of group I should be replaced with parakeet.
- (d) Toucan of group II should be replaced with poison dart frog.

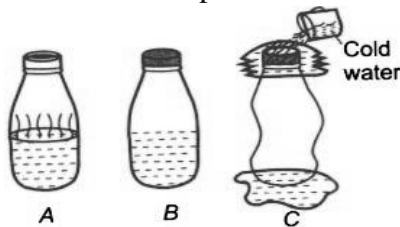
12. The lizard is will adapted to live in human dwellings. Which function of its adaptations is incorrectly described?

Adaptation	Function
(a) Long, sticky tongue	to catch fast moving prey
(b) Long, narrow and flat body	to crawl between narrow crevices and spaces easily
(c) Sticky pads on the underside of the feet	to walk on walls and ceilings without falling
(d) Tail that can drop off and wriggles for a while	to attract mates for reproduction

13. Which of the following is a correct statement?

- (a) In India, wind flows from the land to the ocean in winter season.
- (b) The coastline of India is not vulnerable to cyclones.
- (c) A cyclone is formed in a very high pressure area with very high speed winds revolving around it.
- (d) None of these

14. The figure shows a bottle filled with warm water first and then emptied and cap was put tightly. Then cold water was poured on it. The shape of the bottle gets distorted.

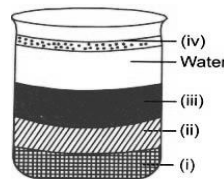


Statement 1: Atmospheric pressure is more than air pressure inside the bottle as the air was driven out.

Statement 2: Air exerts pressure on surfaces with which it comes in contact.

- (a) Statement 1 is the conclusion of statement 2
- (b) Statement 2 is the conclusion of statement 1
- (c) Only statement 1 is correct
- (d) Only statement 2 is correct

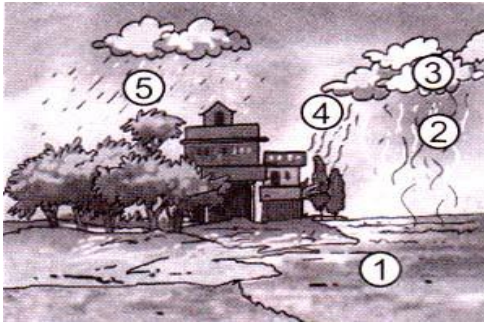
15. Dig up a handful of garden soil and put it in a beaker. Add about 500ml of water and shake the beaker for a little while. Now, allow the soil to settle down. In which order, the soil components will get arranged from (i) to (iv) as shown in the figure



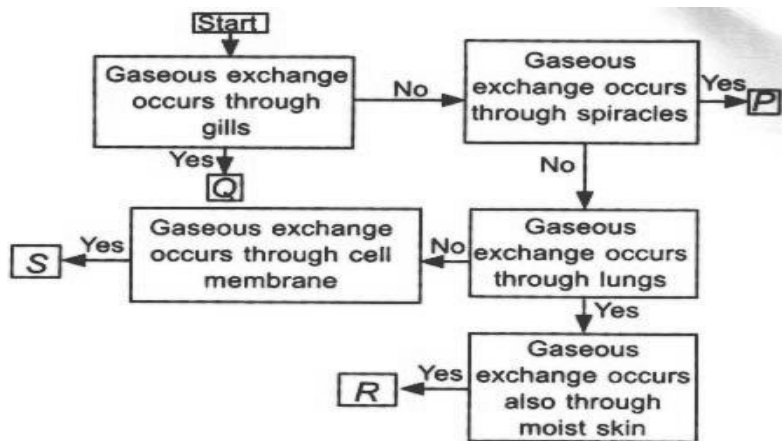
- | | | | |
|------------|--------|-------|--------|
| (i) | (ii) | (iii) | (iv) |
| (a) Sand | Silt | Clay | Gravel |
| (b) Gravel | Sand | Clay | Humus |
| (c) Clay | Gravel | Sand | Humus |

(d) Humus Gravel Sand Clay

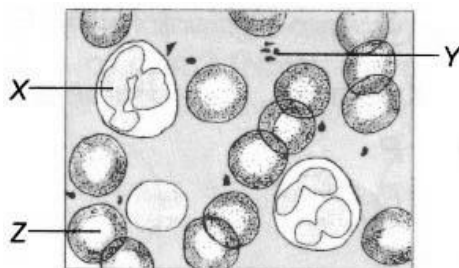
Direction (Q 16 and 17): Refer to the given figure of water cycle and answer the following questions:



16. In the given figure if (1) represents the river water, then what does (4) represent?
 (a) Condensation (b) Respiration (c) Transpiration (d) Precipitation
17. Which of the following represents the process involved in the formation of dew?
 (a) (2) (b) (3) (c) (4) (d) (5)
18. Study the given flow chart about respiratory structures in different organisms. Identify the organisms P, Q, R and S and select the correct option:

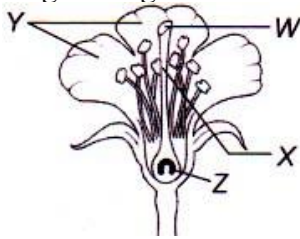


- (a) P – Cockroach, Q – Tadpole, R – Pigeon, S – Earthworm
 (b) P – Grasshopper, Q – Fish, R – Frog, S – Amoeba
 (c) P – Spider, Q – Frog, R – Crab, S – Paramecium
 (d) P – Mynah, Q – Snake, R – Penguin, S – Leech
19. Refer to the given figure of blood cells and select the correct statements regarding X, Y and Z.



- (a) X plays a key role in transporting waste carbon dioxide from the tissues to the lungs.
 (b) The pigment present in Z absorbs oxygen and transports it to the cells all over the body.
 (c) X is able to move on their own
 (d) Y helps the blood to clot whenever there is a wound on the body.

20. Refer to given figure and select the correct option.



- (a) Part labeled as W is the swollen end of axis.
- (b) Part labeled as X is the tubular stalk which connects the stigma and ovary.
- (c) Part labeled as Y from the outermost whorl of a flower
- (d) Part labeled as Z is the male reproductive part of flower

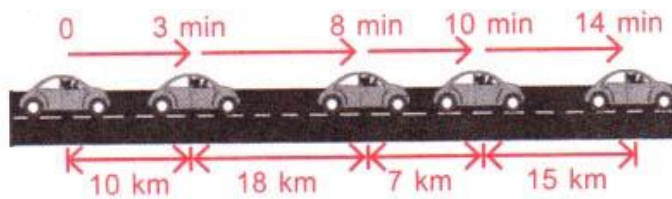
21. The given table lists some plants and their reproductive structures.

Plants	Reproductive structures
Bean plant	Seeds
X	Spores
Garlic	Y

What should be at X and Y?

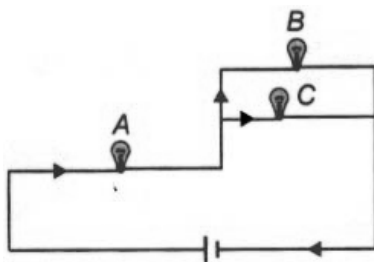
- (a) X – Moss, Y – Spores
- (b) X – Pineapple, Y – Corms
- (c) X – Fern, Y – Bulbs
- (d) X – Moss, Y - Rhizome

22. A car follows the given path as shown in figure. What will be average speed of this car?



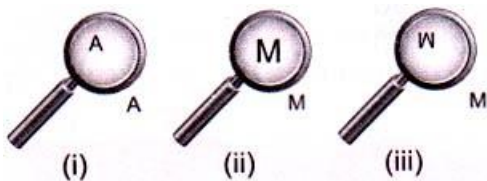
- (a) 1.25km h^{-1}
- (b) 33.33km h^{-1}
- (c) 214.28km h^{-1}
- (d) 48km h^{-1}

23. Three bulbs A, B and C are connected as shown in figure. The bulb B and C are identical. If the bulb C is fused, then



- (a) Brightness of both bulbs A and B will increase
- (b) Brightness of both bulbs A and B will decrease
- (c) Brightness of the bulb A decreases and that of bulb B increases
- (d) None of the bulbs will glow

24. Which of the following cases is/are possible for convex lens?



- (a) (i) and (ii) (b) (ii) and (iii) (c) (i) and (iii) (d) only (i)
25. An object approaches a convergent lens from the left of the lens with a uniform speed 5 m s^{-1} and stops at the focus. The image
- (a) Moves away from the lens with a uniform speed 5 m s^{-1}
(b) Moves away from the lens with a uniform acceleration
(c) Moves away from the lens with a non uniform acceleration
(d) Moves towards the lens with a non uniform acceleration.
26. Which part of the plant called its food factory?
- (a) Fruits (b) Seeds (c) Leaves (d) Flowers
27. The raw materials for photosynthesis:
- (a) CO_2 (b) CO_2 , O_2 , H_2 (c) N_2 , Water (d) O_2 , Water
28. Which one of the following is pair of symbiotic organisms?
- (a) Lichens (b) Rhizobium and a legume (c) None of these (d) Both a and b
29. Bile is produced in:
- (a) Gall bladder (b) Blood (c) Liver (d) Spleen
30. The finger like outgrowths of amoeba helps to ingest food. However, the finger like outgrowths of human intestine helps to?
- (a) Digest the fatty food substances (c) Absorb the digested food
(b) Make the food soluble (d) Absorb the undigested food
31. Which is not digested by human?
- (a) Protein (b) Fats (c) Glucose (d) Cellulose
32. The enzymes present in the saliva convert:
- (a) Fats into fatty acids and glycerol (c) Proteins into amino acids
(b) Starch into simple sugars (d) Complex sugars into simple sugars
33. What is the scientific name of mulberry tree?
- (a) Magnifera Indica (b) Marus alba (c) Desmadium girence (d) None of these
34. Which of the following is not a type of silk?
- (a) Mulberry silk (b) Tassar silk (c) Mooga silk (d) Moth silk
35. Silk fibre is obtained from:
- (a) Fleece of sheep (b) Cotton ball (c) Cocoon (d) Shiny jute stalk
36. The rearing of silkworms for obtaining silk is called:
- (a) Agriculture (b) Silk (c) Sericulture (d) Silviculture

37. Which one is filled in the bulb of a thermometer?
 (a) Mercury (b) Lead (c) Copper (d) Silver
38. A marble tile would feel cold as compared to a wooden tile on a winter morning because the marble tile:
 (a) Is polished while wooden tile is not polished
 (b) Is a better conductor of heat than the wooden tile
 (c) Reflects more heat than wooden tile
 (d) Is a poor conductor of heat than the wooden tile
39. Conduction is the method of transfer of heat is in;
 (a) Liquids (b) Gases (c) Solids (d) Vacuum
40. An oxide is acid and has a pungent odour. It would be:
 (a) Sulphur dioxide (b) Carbon dioxide (c) Sodium oxide (d) Nitrogen dioxide

Subject: English

QI. Choose the correct Synonym for the given words:

1. Graphic
 (a) Obscure (b) Implicit (c) Visual (d) Vague
2. Initiative
 (a) Apathy (b) Inventiveness (c) Confidence (d) Cowardice
3. Peevish
 (a) Pleasant (b) Angry (c) Hungry (d) Happy
4. Liberal
 (a) Miserly (b) Generous (c) Visionary (d) Imaginative
5. Unusual
 (a) Unexceptional (b) Uncommon (c) Unnoteworthy (d) Unimportant

QII. Choose the correct Antonyms for the given words:

6. Inferior
 (a) Secondary (b) Superior (c) Subsidiary (d) Minor
7. Acrid
 (a) Harsh (b) Caustic (c) Amiable (d) Pungent
8. Perturb
 (a) Annoy (b) Assure (c) Upset (d) Vex
9. Spread
 (a) Prepare (b) Diffusion (c) Collect (d) Increase
10. Trust
 (a) Rely (b) Doubt (c) Real (d) Faith

QIII. Fill in the blanks with the most appropriate options:

11. _____ Ranjit get good marks in Mathematics test?
 (a) Has (b) Don't (c) Hasn't (d) Didn't
12. Pleasing is the smell of the fresh cut grass, _____?
 (a) aren't it (b) isn't it (c) hasn't it (d) won't it
13. Romit won't reach on time, _____?
 (a) won't he (b) would he (c) will he (d) wouldn't he
14. _____ does they invite?
 (a) Whose (b) Whom (c) What (d) Which

15. _____ you like to drink milk twice daily?

- (a) When (b) Does (c) Do (d) What

QIV. Match the following nouns with their containers:

16. Milk

- (a) Drum (b) Jug (c) Crate (d) Carton

QV. Fill in the blanks with the most suitable verb:

23. The children _____ milk twice every day.

- (a) drink (b) drinks (c) drinking (d) none of these

24. Rajesh _____ his mother tongue very fluently.

- (a) speak (b) speaking (c) speaks (d) none of these

25. Either Ravi or I _____ going for party.

- (a) am (b) are (c) were (d) have

26. His two sons _____ still very young.

QVI. Fill in the blanks with the most suitable adjectives:

27. After a week of extreme heat, it is much _____ now.

- (a) cool (b) coolest (c) cooler (d) none of these

28. It is a _____ set room. It looks _____

- (a) beautiful/nicely (b) beautifully/nicely (c) beautifully/nice (d) beautiful/nice

29. My grandfather gifted me _____ clock on my birthday.

- (a) a wonderful old square British (c) a square wonderful old British
(b) an old British wonderful square (d) a British old square wonderful

30. My seat was _____ to the window.

- (a) last (b) first (c) later (d) next