

Sample Question Paper

1. Vitamin A deficiency in the human diet causes:

- | | |
|--------------------------------|------------------------------|
| (A) Night blindness | (B) Scurvy, beriberi, goitre |
| (C) Goitre, anemia, weak bones | (D) Kwashiorkor, tooth decay |
| (E) None of these. | |

2. _____ builds, maintains and replaces tissues in our body.

- (A) Vitamins
 (B) Fats
 (C) Carbohydrates
 (D) Proteins
 (E) None of these.

3. Which of these systems need potassium?

- | | |
|--------------------|-----------------------|
| (i) Nervous | (ii) Muscular |
| (iii) Respiratory | (iv) Digestive |
| (A) (i) & (iv) | (B) (iii) & (iv) |
| (C) (i) & (ii) | (D) (i), (ii) & (iii) |
| (E) None of these. | |

4. Which can be turned into manure?

- | | |
|---------------------|----------------------|
| (A) Organic waste | (B) Industrial waste |
| (C) Dry house waste | (D) Kitchen waste |
| (E) None of these. | |

5. A person can avoid a heart attack if:

- | | |
|-------------------------------|---------------------------|
| (A) He exercises regularly | (B) He eats fat rich food |
| (C) He maintains good hygiene | (D) He eats fresh food. |
| (E) None of these. | |

6. Identify the machine and the process carried out on it.

- (A) Handloom, weaving
 (B) Charkha, gining
 (C) Comb, ginning
 (D) Handloom, spinning
 (E) None of these.



7. Jute is obtained from the _____ of the plant cotton is obtained from the _____ of the plant.

- (A) Flower, fruit (B) Stem, fruit
 (C) Leaf, fruit (D) Fruit, stem
 (E) None of these.

8. Mahatma Gandhi spun yarn on a _____ .

- (A) Takil (B) Spindle
 (C) Charkha (D) Charkra
 (E) None of these.

9. Threads are made from _____ .

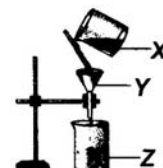
- (A) Yarn (B) Fibres
 (C) Fabric (D) Strands
 (E) None of these.

10. The process of making yarn from fibres is called ____ .

- (A) Ginning
 (B) Wearing
 (C) Spinning
 (D) Knitting
 (E) None of these.

11. What are X, Y and Z in the figure?

- (A) X-Mixture, Y-Residue, Z-Filtrate
 (B) X-Mixture, Y-Filtrate, Z-Residue
 (C) X-Residue, Y-Filtrate, Z-Mixture
 (D) X-Filtrate, Y-Residue, Z-Mixture.
 (E) None of these.



12. What are the characteristics of metals?

- (A) Good conductors of electricity and heat; solid at room temperature; transparent, shine brightly when polished.
 (B) Good conductors of electricity and heat; solid at room temperature; opaque, except in extremely thin films; do not shine at all when polished.
 (C) Bad conductors of electricity and heat; solid at room temperature; opaque, except in extremely thin films.
 (D) Good conductors of electricity and heat; solid at room temperature; opaque, except in extremely thin films; shine brightly when polished.
 (E) None of these.

13. A mixture contains three different substances X, Y and Z. They are of same size and colour. X particles are heavy and non-magnetic, Y particles are light and non-magnetic while Z particles are magnetic. Which of the following methods can be used to separate these particles?

- (A) Handpicking followed by filtration.
- (B) Winnowing followed by magnetic separation.
- (C) Magnetic separation followed by sieving.
- (D) Sublimation followed by distillation.
- (E) None of these.

14. Salt water can be separated by _____.

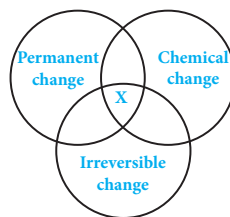
- (A) Filtration
- (B) Crystallization
- (C) Distillation
- (D) Chromatography
- (E) None of these.

15. Name a process which is a combination of evaporation and condensation

- (A) Centrifugation
- (B) Decantation
- (C) Filtration
- (D) Distillation
- (E) None of these.

16. X in the Venn diagram represents _____.

- (A) Ripening of fruits
- (B) Boiling of water
- (C) Formation of clouds
- (D) Heating of an electric iron
- (E) None of these.



17. Out of these, which are periodic changes?

- (i) Tsunami
 - (ii) Rising of the Sun
 - (iii) Breaking of a glass bottle
 - (iv) Volcanic eruption
 - (v) Beating of the heart
- (A) (i), (iv), (v)
 - (B) (ii), (v), (iii)
 - (C) (i), (ii), (iv)
 - (D) (ii), (iv), (v)
 - (E) None of these.

22. Which of these statement is correct?

- (A) A and B are both reversible
- (B) A is reversible, B is irreversible
- (C) Both are irreversible
- (D) A is irreversible, B is reversible
- (E) None of these.



A



B

19. Ratan is mixing salt with water. What kind of change is it? Why?

- (A) Chemical, a new substance is formed.
- (B) Chemical and reversible, as on heating. Water evaporates to get back the salt.
- (C) Physical and irreversible, as salt mixes with water without losing its characteristics.
- (D) Physical and temporary, as on heating, evaporation takes place and salt is recovered. No change takes place in the characteristics of salt.
- (E) None of these.

20. Tony is magnetizing a needle. This is a _____ change.

- (A) Chemical, irreversible
- (B) Chemical, reversible
- (C) Physical, reversible
- (D) physical, irreversible
- (E) None of these.



21. Read the features of a plant as given below.

- (i) **Roots are much reduced in size**
- (ii) **Stems are generally long and narrow**
- (iii) **Stems possess air spaces**
- (iv) **Leaves are large and flat**
- (v) **They have waxy upper surfaces**

To which of these habitats does this plant belong?

- (A) Desert
- (B) Tropical rainforest
- (C) Water
- (D) Polar region
- (E) None of these.

22. Match column I with column II and select the correct option from the codes given below.

- | Column I | Column II |
|----------------------------------|-------------------------|
| (a) Hinge joint | (i) Neck joint |
| (b) Gliding joint | (ii) Hip joint |
| (c) Pivot joint | (iii) Knee joint |
| (d) Ball and socket joint | (iv) Wrist joint |
- (A) (a) – (iii), (b) – (iv), (c) – (i), (d) – (ii)
 - (B) (a) – (iv), (b) – (i), (c) – (iii), (d) – (ii)
 - (C) (a) – (i), (b) – (ii), (c) – (iv), (d) – (iii)
 - (D) (a) – (ii), (b) – (iii), (c) – (i), (d) – (iv)
 - (E) None of these.

23. Camel shows many adaptations to survive in the desert. Which of the following statements (P, Q, R & S) does not hold true regarding this?

P. It has a hump where fat is stored.

Q. It can stay without water for a long time.

R. It excretes large amount of water in the form of urine.

S. It sweats a lot.

(A) P only

(B) Q only

(C) Q and S

(D) R and S

(E) None of these.

24. Which of the following statements is/are correct?

(i) The soft substance present inside the bones is called bone marrow.

(ii) Floating ribs are the last three pairs of the ribs that are not joined to the breastbone.

(iii) The only movable bone in skull is the upper jaw bone.

(iv) The longest bone in the body is humerus.

(A) (ii) only

(B) (i) only

(C) (i) and (ii)

(D) (iii) and (iv)

(E) None of these.

25. The word 'cryptograms' indicates _____.

(A) Flowering plants

(B) Green plants

(C) Non-flowering plants

(D) Small herbs

(E) None of these.



26. When the guitarist plucks at the string of his guitar. What kind of motion does the plucked string undergo?

(A) Rotatory

(B) Periodic

(C) Linear

(D) Oscillatory

(E) None of these.



27. Adrian travelled by train to Valsad. The train travelled 385 km in the first 2 hours and then picked up speed. In the next 3 hours. It travelled double the speed i.e. 115500 m. How far did it travel in 5 hours?

(A) 1450 km

(B) 1540 km

(C) 1440 km

(D) 1640 km

(E) None of these.

- 28. A submarine has a streamlined body as _____.**
- (A) It offers least resistance to water (B) It is resistant to heat
(C) It can move faster (D) It looks attractive
(E) None of these.
- 29. Aakash's teacher asked him to find the boiling point of milk. What can he use to find out this information?**
- (A) Centimeter (B) Barometer
(C) Thermograph (D) Thermometer
(E) None of these.
- 30. Which of these was not a unit of measure in ancient times?**
- (A) Cubit (B) Hand span
(C) Foot (D) String
(E) None of these.
- 31. A solid, transparent sphere has a small, opaque dot at its centre. When observed from outside, the apparent position of the dot will be**
- (A) Closer to the eye than its actual position
(B) The same as its actual position
(C) Farther away from the eye than its actual position
(D) All of these.
(E) None of these.
- 32. Anjali placed a meter stick in the playground at 8.00 a.m. in the morning. How will the shadow of the stick at 12:00 noon be in comparison to the one at 8: a.m. ?**
- (A) There will be no shadow.
(B) The shadow will be longer and on the opposite side of the stick.
(C) The shadow will be shorter and on the same side as the sun.
(D) The shadow will be shorter and on the opposite side of the sun.
(E) None of these.
- 33. Shadow moves on screen when**
- (i) The source moves parallel to the screen.
(ii) The object moves parallel to the screen.
(iii) The source moves away from the screen.
(iv) Colour of the source of light changes.
- (A) (i) & (ii) (B) (ii) & (iii)
(C) (iii) & (iv) (D) (i), (ii) & (iii)
(E) None of these.

34. The image formed by a plane mirror is _____.

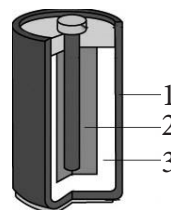
- (A) Inverted
- (B) Erect
- (C) Diminished
- (D) Magnified
- (E) None of these.

35. The dense mist observed on early morning is _____.

- (A) Opaque
- (B) Translucent
- (C) Transparent
- (D) None of these
- (E) None of these.

36. Label the cell in the correct order.

- (A) 1 – Carbon rod; 2 – Zinc container; 3 – NH_4Cl
- (B) 1 – NH_4Cl ; 2 – Zinc container; 3 – Carbon rod
- (C) 1 – Zinc container; 2 – Carbon rod; 3 – NH_4Cl
- (D) 1 – Carbon rod; 2 – NH_4Cl ; 3 – Zinc container
- (E) None of these.



37. The electrician came to your house to repair a fan. He wore rubber gloves. Why?

- (A) Rubber feels cool while electricity is hot
- (B) Rubber is soft, making it easy to touch things
- (C) Rubber will protect him from electric shock
- (D) All of these
- (E) None of these.



38. Who invented the electric cell?


- (A) Alessandro Volta
- (B) Thomas Alva Edison
- (C) Michael Faraday
- (D) Albert Einstein
- (E) None of these.

39. Electrical appliances in houses and school are connected in a ___ circuit.

- (A) Series
- (B) Parallel
- (C) Multiple
- (D) Single
- (E) None of these.

40. A fuse wire is used at the _____ of an electric circuit.

- (A) End
- (B) Middle
- (C) Beginning
- (D) Anywhere
- (E) None of these.

41. Richa has two bars of the same size and shape. One is a magnet, the other is not. How will she know which is which?
- By suspending them freely from a string.
 - By using the test of magnetic attraction.
 - By breaking them into two pieces.
 - By using the magnetic test of repulsion.
 - None of these.
42. The bar kept across the poles of the magnet helps it to _____
- Increase its magnetic power
 - Reduce its power
 - Maintain its power
 - Attract more magnetic substances
 - None of these.
- 
43. A permanent magnet is a device that retains a magnetic field _____.
- With a powder source
 - Without a power source
 - With the help of copper wires
 - All of these.
 - None of these.
44. The mariner's compass is based on the principle that _____
- A magnet attracts metal
 - Comes to rest in the north-south direction
 - Gets repelled when another magnet is brought near
 - Has two poles
 - None of these
25. A magnet will not attract:
- A nail
 - A screw
 - Paper
- Only (iii)
 - Only (ii)
 - (i) & (ii)
 - (ii) & (iii)
 - None of these.
46. Which of these are methods of preventing rust?
- Greasing
 - Electroplating
 - Galvanizing
 - All of these
 - None of these.

47. Fog occurs on cold morning. This is because _____.

- (A) There is sudden evaporation.
- (B) There is condensation of water vapour near the ground.
- (C) The air is unsaturated.
- (D) Plants transpire early in the morning.
- (E) None of these.

48. Which of these is correct?

- (A) Solution + Solvent = Solute
- (B) Solvent + Solute = Solution
- (C) Solute + Solution = Solvent
- (D) All of these
- (E) None of these.

49. Solubility ____ with increase in water.

- (A) Decreases
- (B) Increases
- (C) Remain the same
- (D) All of these
- (E) None of these.

50. The density of water is ____ at 4°C.

- (A) 1 gm/cc
- (B) 1 mg/cc
- (C) 1 dg/cm
- (D) 1gm/ cm
- (E) None of these.

Note: The actual Question Paper will translated in Hindi at the time of exam.

Darken your choice with HB Pencil																							
1	A	B	C	D	E	14	A	B	C	D	E	27	A	B	C	D	E	40	A	B	C	D	E
2	A	B	C	D	E	15	A	B	C	D	E	28	A	B	C	D	E	41	A	B	C	D	E
3	A	B	C	D	E	16	A	B	C	D	E	29	A	B	C	D	E	42	A	B	C	D	E
4	A	B	C	D	E	17	A	B	C	D	E	30	A	B	C	D	E	43	A	B	C	D	E
5	A	B	C	D	E	18	A	B	C	D	E	31	A	B	C	D	E	44	A	B	C	D	E
6	A	B	C	D	E	19	A	B	C	D	E	32	A	B	C	D	E	45	A	B	C	D	E
7	A	B	C	D	E	20	A	B	C	D	E	33	A	B	C	D	E	46	A	B	C	D	E
8	A	B	C	D	E	21	A	B	C	D	E	34	A	B	C	D	E	47	A	B	C	D	E
9	A	B	C	D	E	22	A	B	C	D	E	35	A	B	C	D	E	48	A	B	C	D	E
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11	A	B	C	D	E	24	A	B	C	D	E	37	A	B	C	D	E	50	A	B	C	D	E
12	A	B	C	D	E	25	A	B	C	D	E	38	A	B	C	D	E						
13	A	B	C	D	E	26	A	B	C	D	E	39	A	B	C	D	E						