

Sample Questions Paper

1. Select the incorrect statement.

- (A) Phloem tubes are only found in the leaves of plants as the is where the sugars are made.
- (B) Volume of blood in an average human adult is 10 liters.
- (C) Blood contains many more white blood cells than red blood cells.
- (D) All of the above
- (E) None of these.

2. Which of the following processes, if absent, would most significantly affect the movement of water through xylem in the stem?

- (A) Minerals salts being taken in by active transport in the roots.
- (B) Water lost from the aerial parts of the plant.
- (C) Water being given off during respiration.
- (D) Water taken in by osmosis in the roots.
- (E) None of these.

3. Pulmonary _____ carries _____ rich blood from the heart to the lungs and pulmonary _____ carries _____ rich blood from the lungs to the heart.

Select the option that correctly fills up the blank spaces in the above passage.

- (A) Vein, Carbon dioxide, Artery, Oxygen
- (B) Vein, Oxygen, artery, Carbon dioxide
- (C) Artery, Carbon dioxide, Vein, Oxygen
- (D) Artery, Oxygen, Vein, Carbon dioxide
- (E) None of these.

4. Select the correct statement

- (A) Veins carry oxygenated blood
- (B) Arteries are located below our skin.
- (C) Capillaries connect the veins and arteries.
- (D) The heart is a special kind of tissue.
- (E) None of these.

5. Pick the odd one out:

- (A) Salt
- (B) Urea
- (C) Blood
- (D) Water
- (E) None of these.

6. The equation below shows the process of respiration.

Oxygen + _____ = _____ + _____ + water vapour

- (A) Energy, sugar, carbon dioxide
- (B) Starch, carbon dioxide, energy
- (C) Glucose, energy, carbon dioxide
- (D) Water, carbon dioxide, starch
- (E) None of these.

7. Which of the following statements about the function of the lungs is true?

- (A) The lungs remove oxygen from the body.
- (B) The lungs remove carbon dioxide from the body.
- (C) The lungs transport oxygen produced by the heart.
- (D) The lungs transport carbon dioxide produced by the heart.
- (E) None of these.

8. The air that we breathe out has a _____ than the air that we breathe in .

- (A) Lower temperature
- (B) Greater amount of oxygen
- (C) Greater amount of carbon dioxide
- (D) Smaller amount of water vapour
- (E) None of these.

9. What causes fermentation?

- (A) Aerobic respiration
- (B) Breathing
- (C) Anaerobic respiration
- (D) Photosynthesis
- (E) None of these

10. What is the normal breathing rate in a human adult?

- (A) 60 breathe per minute
- (B) 40 breaths per minute
- (C) 12 – 18 breathe per minute
- (D) 24 – 30 breaths per minute
- (E) None of these.

11. What is sludge?

- (A) By-products of wastewater treatment
- (B) Waste from homes and hospitals
- (C) Decomposed sewage
- (D) All of these
- (E) None of these.

12. When is World Water Day celebrated?

- (A) 22 March
- (B) 21 June
- (C) 22 December
- (D) Never!
- (E) None of these.

13. Which of these are long term effects of global warming?

- (A) **Melting of glaciers and a rise in sea level**
 - (B) **Global change in climate**
 - (C) **Change in type of vegetation**
 - (D) **Floods and droughts**
 - (E) **None of these.**
- (a) (A) & (B)
 - (b) (B) & (C)
 - (c) (A), (B) & (C)
 - (d) All of these
 - (e) None of these.

14. Which of these is not an advantage of non-renewable sources of energy?

- (A) Cheap
- (B) Environmentally friendly
- (C) Readily available
- (D) Efficient
- (E) None of these.

15. Which of these will happen if there is a decrease in plant population?

- (A) **Increase in temperature**
 - (B) **Plant eaters will compete fiercely for food**
 - (C) **Animals will get less water**
 - (D) **Decrease in rainfall**
- (A) (A) & (B)
 - (B) (A), (B) & (C)
 - (C) (A), (B) & (D)
 - (D) All of these
 - (E) None of these.

16. Pick the odd one out

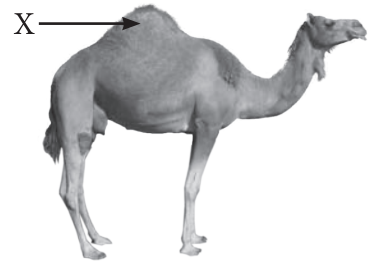
- (A) Temperature
- (B) Wind speed
- (C) Climate
- (D) Rainfall
- (E) None of these.

17. What kind of climate does North- east India have?

- (A) Extremely cold
- (B) Hot and dry
- (C) Hot and moist
- (D) Wet
- (E) None of these.

18. What is the function of the part labeled as 'X' ?

- (A) To protect the camel from heat.
- (B) To provide a place for the saddle.
- (C) To store fat to be used when food becomes scarce in the desert.
- (D) To control evaporation on hot days.
- (E) None of these.



19. This creature rarely comes down on the ground. Why?

- (A) It cannot walk.
- (B) It is easily attacked by predators.
- (C) It is a good climber.
- (D) It is able to get sufficient food on the trees.
- (E) None of these.



20. Name the Instrument which measure humidity.

- (A) Thermometer
- (B) Hygrometer
- (C) Hydrometer
- (D) Rain gauge
- (E) None of these

21. Respiration is a _____ change.

- (A) Physical & exothermic
- (B) Chemical & endothermic
- (C) Chemical & exothermic
- (D) Physical & endothermic
- (E) None of these.

22. What happens when water freezes?

- (A) A new substance is formed.
- (B) No new substance is formed.
- (C) Water gets converted to its solid form
- (D) Both A & B
- (E) None of these.

23. Rusting can be prevented by depositing a layer of zinc on iron.

This process is called _____.

- (A) Galvanization
- (B) Crystallization
- (C) Ozonization
- (D) Oxidation
- (E) None of these.

24. A chemical change _____ reversed.

- (A) Cannot be
- (B) May be
- (C) Can be
- (D) Can sometimes be
- (E) None of these.

25. Which substances cannot be further decomposed by a normal chemical reaction?

- (A) Air
- (B) Water
- (C) Copper
- (D) Sugar
- (E) None of these

26. Why do cyclones spin?

- (A) Because the wind pushes here and there
- (B) Because of the spinning of the Earth
- (C) As winds move from low pressure to high pressure
- (D) As winds move from high pressure to low pressure
- (E) None of these.

27. Which one of the following places is unlikely to be affected by a cyclone?

- (A) Chennai
- (B) Mangaluru (Mangalore)
- (C) New Delhi
- (D) Pune
- (E) None of these.

28. Which of these technologies help in cyclone forecasts?

- (A) Radar
- (B) Computers
- (C) Satellites
- (D) Both a & c
- (E) None of these.

29. The phenomenon of wind occurs because _____

- (A) Of the uneven heating of the earth's surface by the sun.
- (B) Of the spinning of the Earth
- (C) Of moving air
- (D) Air exerts pressure
- (E) None of these.

30. Wind direction can be found out by using a _____.

- (i) Wind vane (ii) Wind sock
 (iii) anemometer (iv) Lighting and agarbatti and seeing which way the smoke blows
- (A) (i), (ii) & (iii) (B) (ii) & (iii)
 (C) (i), (ii) & (iii) (D) (i) & (iii)
 (E) None of these

31. From which plant is 'litmus' extracted?

- (A) Litchi (B) Lichen
 (C) Lime (D) All of these
 (E) None of these.

32. Acid + _____ (i) → _____ (ii) + water

- (A) (i) Salt, (ii) Base
 (B) (i) Base, (ii) Salt
 (C) (i) Base, (ii) Oxygen
 (D) (i) Salt, (ii) Acid
 (E) None of these.

33. Sample	Blue litmus red	Red litmus blue
(A) Tea	✓	×
(B) Tomato Juice	×	✓
(C) Quick lime	✓	×
(D) Window cleaner	×	✓

Which of these are correctly matched?

- (A) A & B (B) B & C
 (C) A & D (D) All of these
 (E) None of these.

34. Each cell of our body contains this acid which controls our looks, height and so on.

Which acid is it?

- (A) LNA (B) DNA
 (C) NDA (D) RNA
 (E) None of these.

35. The pH of acids is _____ .

- (A) > 7 (B) = 7
 (C) < 7 (D) < 5
 (E) None of these.

36. Until the process of melting is complete, there is _____ in temperature.

- (A) Increase
- (B) Decrease
- (C) No change
- (D) Absolute change
- (E) None of these.

37. The SI unit of heat is _____.

- (A) Calorie
- (B) Joule
- (C) Celcius
- (D) Kelvin
- (E) None of these.

38. kareena wants to eat jam and bread. The lid of the jam bottle would not come off, though she tried very hard. Which of these will work best for her?

- (A) Pour hot water over it, it will expand and be easy to open.
- (B) Put it in a bucket of ice, it will expand and be easy to open.
- (C) Make a hole in the lid so the trapped air comes out.
- (D) Hammer it lightly from all sides. It will open.
- (E) None of these.

39. The first thermometer was built by _____.

- (A) Benjamin Thompson
- (B) Benjamin Franklin
- (C) Anders Celcius
- (D) Galileo Galilei
- (E) None of these.

40. What happens when camphor is heated?

- (A) It expands
- (B) It sublimates
- (C) It evaporates
- (D) It condenses
- (E) None of these.

41. Arrange the steps of processing fibre into wool in the correct order.

- | | | |
|---------------|---------------------------|---------------------|
| (i) Dying | (ii) Sorting | (iii) Shearing |
| (iv) Scouring | (v) Straightening/rolling | (vi) Removing burrs |
- (a) ii → i → iii → iv → vi → v
 - (b) iii → ii → iv → i → v → vi
 - (c) iii → iv → ii → vi → i → v
 - (d) iv → i → iii → vi → ii → v
 - (e) None of these.

42. The silkworm is a) pupa b) caterpillar?

- (A) B
- (B) A
- (C) Both a & b
- (D) Neither a nor b
- (E) None of these.

43. The properties below describe which of the following fabrics?

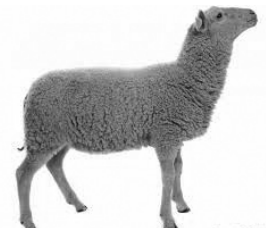
- (i) Machine made
 - (ii) Soft to touch
 - (iii) Does not get creased
 - (iv) Can be washed
 - (v) Is creaseless
- (A) Cotton
 - (B) Silk
 - (C) Nylon
 - (D) Wool
 - (E) None of these.

44. Bakhrawal, Marwari, Nali are types of _____.

- (A) Silk
- (B) Goats
- (C) Cotton
- (D) Sheep
- (E) None of these.

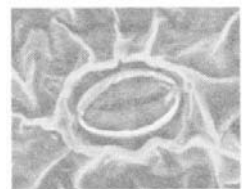
45. Identify the animal. Where is it found?

- (A) Llama, Tibet
- (B) Alpaca, South America
- (C) Angora goat, Kashmir
- (D) Yak, Lower Himalayas
- (E) None of these.



46. The given part of a plant helps out in _____.

- (A) Photosynthesis
- (B) Respiration
- (C) Transpiration
- (D) All of these
- (E) None of these.



47. This is a skull of an animal with sharp incisors.

It is the skull of

- (A) Herbivore
- (B) Carnivore
- (C) Omnivore
- (D) Saprophyte
- (E) None of these.



48. Name the protein contained in egg white.

- (A) Casein (B) Albumin
(C) Pepsin (D) Trypsin
(E) None of these.

49. Who has homodont teeth?

- (A) Humans (B) Dogs
(C) Frogs (D) Cows
(E) None of these.

50. The organism in the picture is a _____.

- (A) Symbiont (B) Saprophyte
(C) Parasite (D) Omnivore
(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)
10	(A) (B) (C) (D) (E)	23	(A) (B) (C) (D) (E)	36	(A) (B) (C) (D) (E)	49	(A) (B) (C) (D) (E)
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)		