

Time allowed: **3 hours**; Maximum marks: **90**

General Instructions:

- a) All Questions are compulsory
- b) The Question Paper consists of 42 Questions divided in to four sections A, B, C and D
- c) Section- A comprises of 15 questions of one mark each
- d) Section- B comprises of 11 questions of two mark each
- e) Section- C comprises of 11 questions of three mark each
- f) Section- D comprises of 5 questions of Four mark each

Section – A

1. The mineral required for the proper functioning of the thyroid gland is
 - a. Iron
 - b. Iodine
 - c. Calcium
 - d. Phosphorus
2. Hay and grains are eaten by
 - a. Cats
 - b. Lions
 - c. Tigers
 - d. Buffaloes
3. Which part of the flower protects it when it is in the bud form?
 - a. Petals
 - b. Sepals
 - c. Stamen
 - d. Filament
4. From which part of the jute plant is the jute fibre obtained?
 - a. Stem
 - b. Roots
 - c. Leaves
 - d. Flower
5. During which season is the jute plant cultivated?
 - a. Rainy season
 - b. Spring season
 - c. Winter season
 - d. Summer season

6. Fibrous roots are associated with
 - a. Carrots
 - b. Parallel venation
 - c. Many lateral roots
 - d. Reticulate venation

7. Which of the following is not made of glass?
 - a. Beaker
 - b. Window
 - c. Tumbler
 - d. Window pane

8. Which of the following is not a property of plastics?
 - a. They do not corrode.
 - b. They can be moulded into any shape.
 - c. They are obtained from petroleum oil.
 - d. They are good conductors of heat and electricity.

9. The second hand of a clock moves _____ than the hour hand.
 - a. Faster
 - b. Slower
 - c. With the same speed
 - d. Faster only at some intervals

10. We cannot predict what is kept in a cardboard carton because
 - a. Cardboard is opaque.
 - b. Cardboard is translucent.
 - c. Cardboard is transparent.
 - d. Cardboard is dark in color.

11. Hand span and leg span are units of length which are _____ for all men.
 - a. Not the same
 - b. Exactly the same
 - c. Approximately the same
 - d. None of the above

12. The pendulum of a clock has
 - a. Periodic motion
 - b. Circular motion
 - c. Rectilinear motion
 - d. Curvilinear motion

13. Which of the following is not a source of light?
- Candle
 - Sun
 - Torch
 - Mirror
14. The length of a playground is ten times the length of a room. If room is 10 m long, then the playground is ____ long.
- 1 m
 - 10 cm
 - 100 m
 - 1000 m
15. The movement of a screw driver is an example of
- oscillatory motion
 - circular and linear motion
 - rotatory and linear motion
 - circular and rotatory motion

Section – B

16. What are omnivores? Give two examples.
17. Briefly describe the structure of stamen.
18. How will you show the presence of fats in groundnut?
19. Why mid-day meal scheme has been launched by India?
20. Give difference between periodic and non-periodic motion.
21. Why is it important to include roughage in our diet?
22. Explain how jute plants are harvested.
23. While measuring the length of a pencil with a scale, one end is at 3.0 cm and the other end at 9.5 cm. What is the length of the pencil in millimeters?
24. When a single yarn is pulled out continuously from a torn pair of socks, the fabric gets unraveled. Why?
25. Explain the process of shadow formation.
26. How does a tree look when seen through a pinhole camera? Show diagrammatically.

Section – C

27. Answer the following
- Name the insects which make honey.
 - How do they make honey?
 - What are honeycombs?

- 28.
- How does a flower develop?
 - How is water transported from roots to leaves?
29. List any three functions of proteins in our body.
30. Draw a diagram to show the different parts of a plant and label them.
31. What is spinning? Explain the process. Also name any two devices used for spinning.
32. Answer the following related to water:
- Which of the following are soluble in water?
Groundnut Oil, Potassium Permanganate, Alum, Wax, Sugar, Sand, Petrol, Copper Sulphate
 - What is the importance of oxygen gas dissolved in water?
 - Name two gases which do not dissolve in water.
- 33.
- What are the different types of motion which take place when a car is turning around a roundabout?
 - What is measurement?
34. In a completely dark room, will you be able to see your reflection in the mirror?
- 35.
- Shweta has a piece of cloth that measures 3.5 mtrs. How many smaller pieces can she make each measuring 50 cm in length.
 - What can you tell about the motion of a raindrop when there is no wind?
36. What is the difference between transparent and opaque material?
37. Explain how clouds are formed.

Section - D

38. Define herbivores. List three special characteristics of herbivores.
39. Give the characteristics of the image formed by a plane mirror.
40. List any five ways by which we can conserve water.
- 41.
- Draw a well-labelled diagram showing the parts of a pistil.
 - Briefly describe the structure of the female part of a flower.
42. A and B are two natural fibers. Fiber A is soft and smooth, and is separated from the seeds by the process C. Fiber A is used for making the wicks of oil lamps lit on Diwali. Fiber B is rough and is present as an outer covering on the ripened fruit D which occurs mainly in coastal areas. Fiber B is also known by another name E. This fiber is used for making ropes and mats.
- Name fiber A.
 - Process C is known as?
 - Name fiber B.
 - Write the name E.