I. Choose the correct alternative: [15]

1. A cubit is a length equal to
   (a) Distance between the nose and the toe
   (b) Distance between the finger-tips and the elbow
   (c) Distance between the outstretched arm and the chin
   (d) Distance between the face and the leg

2. Which floral part does the given diagram represent?
   (a) Stamen
   (b) Pistil
   (c) Calyx
   (d) Corolla

3. Rose is an example of a
   (a) Herb
   (b) Tree
   (c) Shrub
   (d) Climber

4. Which part of the Earth’s interior consists of minerals such as iron and magnesium?
   (a) Crust
   (b) Core
   (c) Mantle
   (d) None of the above
5. Name the technique shown below which separates stones of different sizes.

(a) Threshing  
(b) Winnowing  
(c) Handpicking  
(d) Sieving

6. A spade is an example of
(a) First order lever  
(b) Second order lever  
(c) Third order lever  
(d) None of the above

7. Which gas is necessary for respiration in living things?
(a) Oxygen  
(b) Nitrogen  
(c) Hydrogen  
(d) Carbon monoxide

8. Which of the following characteristics of living things is involved when a rabbit runs away from a fox?
(a) Growth  
(b) Response  
(c) Reproduction  
(d) Movement

9. Swallowed food passes into the stomach through the
(a) Small intestine  
(b) Large intestine  
(c) Stomach  
(d) Oesophagus
10. Use of brake pads in the brake system of bicycles and automobiles
   (a) Increases friction
   (b) Decreases friction
   (c) Keeps friction constant
   (d) Does not have any effect on friction

11. 3 minutes = ________ seconds
    (a) 150
    (b) 180
    (c) 120
    (d) 300

12. Which of the following has more than one type of motion?
    (a) A child on a merry-go-round
    (b) A child on a slide
    (c) A child on a swing
    (d) A child rolling on the grass

13. Which of the following is a function of roots?
    (a) Storage of food
    (b) Providing support to the plant
    (c) Absorption of minerals
    (d) All of the above

14. Which of the following pairs consists of only vertebrates?
    (a) Worm and rat
    (b) Frog and fish
    (c) Fish and jellyfish
    (d) Giraffe and jellyfish

15. What can you infer from the given picture?
    (a) A, B: Abiotic components; C, D: Biotic components
    (b) A, B: Biotic components; C, D: Abiotic components
    (c) A, C: Abiotic components; B, D: Biotic components
    (d) A, D: Abiotic components; B, C: Biotic components
II. Answer the following: [10]

16. Give two examples of each:
   (a) Unicellular living things
   (b) Plants which excrete waste in the form of gum

17. What is corolla made of? Describe its role.

18. A Maths book has 200 pages, and the thickness of each page is 0.1 mm. What is the thickness of the book?

19. Draw a labelled diagram to illustrate the process of sublimation of a mixture of common salt and ammonium chloride.

20. Complete the analogy:
   (a) Small intestine : Absorption of useful substances :: Large intestine :
   (b) Stomach : Gastric juice :: Small intestine :

III. Answer the following: [15]

21. What are the harmful effects caused by the depletion of the ozone layer?

22. Why it is not advisable to use plastic bags to store cooked food items?

23. How does a farmer move a boulder stuck in a muddy field?

24. What are the factors responsible for the development of serious crises on the Earth?

25. While measuring the length of a pencil, one end is at 25 cm and the other end is at 0.92 m. What is the length of the pencil in millimetres? What mistake is likely to occur in this question?

IV. Answer in brief: [20]

26. State the type of motion for each of the following movements:

<table>
<thead>
<tr>
<th>Movements</th>
<th>Type of motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Crawling of a baby</td>
<td></td>
</tr>
<tr>
<td>(b) Bullock working on a sugarcane press</td>
<td></td>
</tr>
<tr>
<td>(c) A squirrel climbing up a tree rapidly</td>
<td></td>
</tr>
<tr>
<td>(d) Children swinging on the branches of a banyan tree</td>
<td></td>
</tr>
</tbody>
</table>

27. (a) Why do waterworks have settling tanks?
    (b) How will you separate water and petrol from their mixture?

28. Answer in one word:
    (a) Cap found at the tip of the root.
    (b) Part of the stem between two nodes.
    (c) Small leaf-like part at the base of the leaf.
    (d) Broad and bulging base of the flower.

29. How are goods loaded in a truck weighed?

30. How is oxygen recycled in the atmosphere?