



DELHI PUBLIC SCHOOL NEWTOWN
SESSION 2020-21
HALF YEARLY EXAMINATION (ONLINE)

CLASS: IX
SUBJECT: BIOLOGY

FULL MARKS: 40
TIME: 1 HOUR

Instructions:

- All questions are compulsory.
- This paper consist of 4 pages

QUESTION 1

(a) Answer the following questions:

[3+2=5]

1. Draw an animal cell and label the following parts-

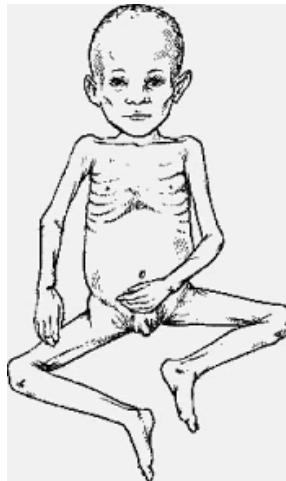
- i. Golgi Apparatus, ii. Mitochondria, iii. Lysosome, iv. Endoplasmic Reticulum.

2. Give reasons for the following:

- i. Mitochondria is known as “the power house of the cell”.
- ii. Lysosome is known as a “suicidal bag”.

(b) Answer the following questions:

[1+2+2=5]

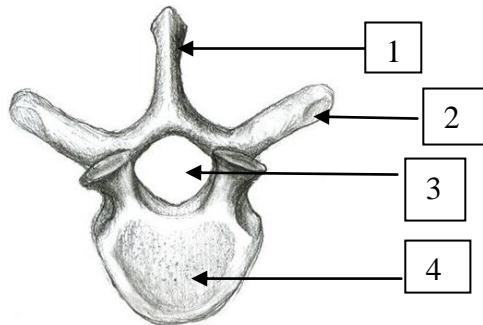


- i. Identify the disease and mention the name of the nutrients due to the lack of which such disease is caused.
- ii. Mention any two symptoms of this disease.
- iii. Define Balanced diet and Malnutrition.

QUESTION 2

(a) Answer the following questions:

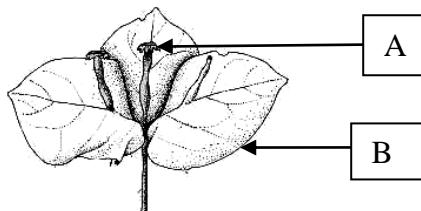
[2+1+1+1=5]



- i. Label 1 to 4.
- ii. Mention the function of the part “3”.
- iii. Name the pad of cartilage found between two vertebrae.
- iv. Mention the name of the second vertebra.

(b) Answer the following questions:

[1+1+3=5]



- i. Identify ‘A’ and ‘B’.
- ii. How is the structure ‘B’ different from the perianth?
- iii. Give reasons for the following:
 - a. The androecium of *Bombax* flower is polyadelphous.
 - b. Ray florets of sunflower is known as neuter.
 - c. Palm is a dioecious plant.

QUESTION 3

(a) Answer the following questions:

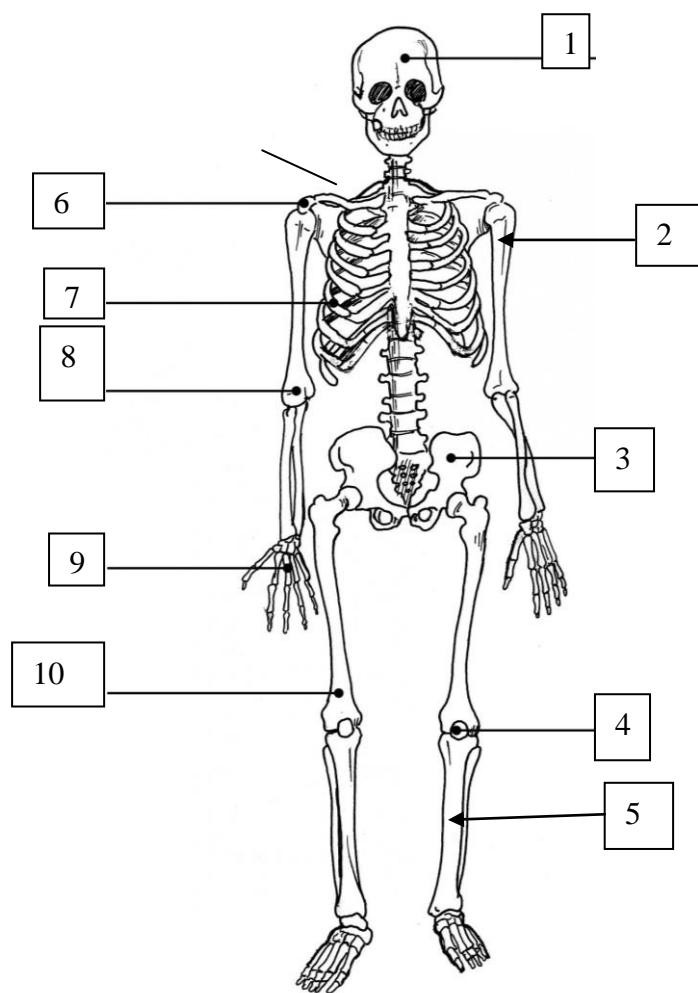
[2+2+1=5]



- i. Identify the tissue. State the structural features of this tissue.
- ii. Mention the location and function of this tissue.
- iii. Is this tissue voluntary or involuntary in function? Explain with an example.

(b) Identify 1 to 10:

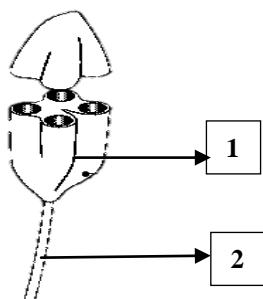
[$\frac{1}{2} \times 10 = 5$]



QUESTION 4

(a) The following figure represents the cross- section of an organ.

[1+2+2=5]



- Label 1 and 2.
- State whether it is a male or a female organ. Mention the name of the flower when only this structure is present in a flower.
- What do you find in the structure “1” and how is it helpful for a plant?

(b) From the following symptoms given below, identify the **type of disease** and the **deficient nutrient** causing the same: [5]

- iv. Poor mental and physical growth in children.
- v. Bones lack calcium and turn soft.
- vi. Poor vision in dim light.
- vii. Spongy and bleeding gums.
- viii. Delay in the clotting time.