



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]

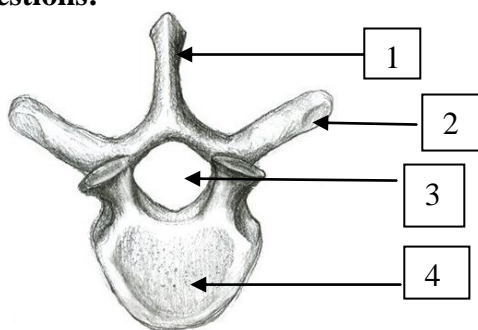


- i. Identify the disease and mention the name of the nutrients due to the lack of which such disease is caused.
ii. Mention any two symptoms of this disease.
iii. Define Balanced diet and Malnutrition.

QUESTION 2

(a) Answer the following questions:

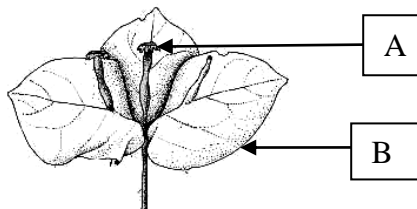
[2+1+1+1=5]



- 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:

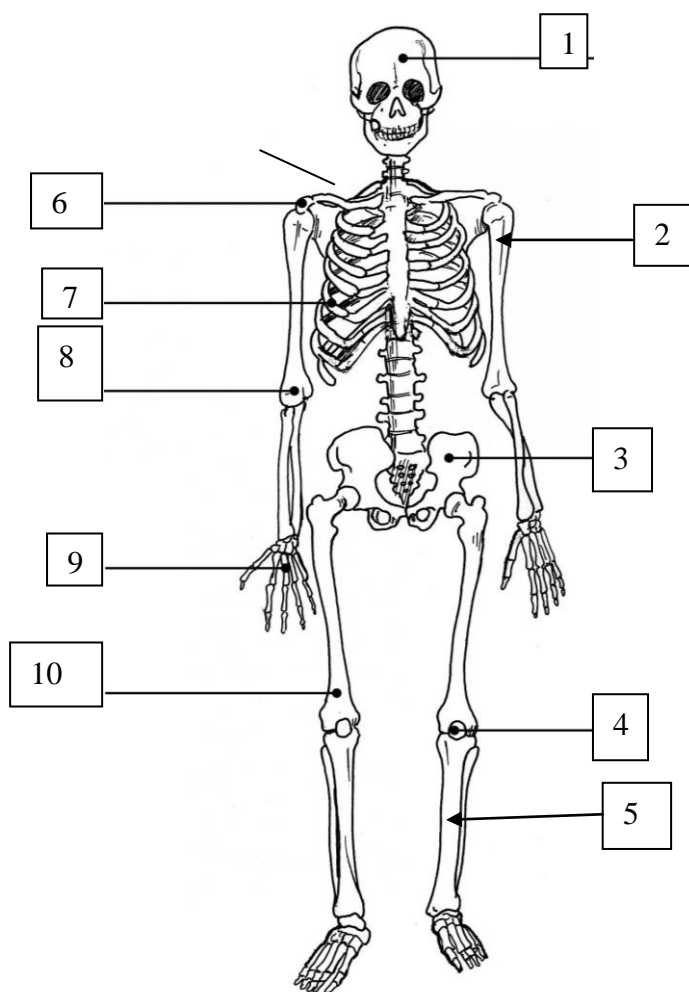
[2+2+1=5]



- 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:

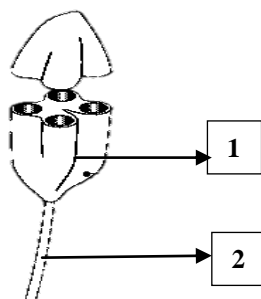
[$\frac{1}{2} \times 10 = 5$]



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.