



NSEB 11th 2026

DPP-05

Structural Organization in Animals

1. The intercellular material of cartilage is;
 - (A) solid and pliable.
 - (B) solid and non-pliable.
 - (C) hollow and soft.
 - (D) hollow and jelly-like.

2. Select the incorrect statement.
 - (A) Most of cartilage in vertebrate embryo gets replaced by bones in adults.
 - (B) Chondrocytes are cartilage cells which are found in between collagen fibres.
 - (C) Cartilage form the human nose except its tips.
 - (D) Cartilage is present between two adjacent vertebrae.

3. Bones are hard and non-pliable due to the presence of;
 - (A) Calcium salts (B) Elastin fibres
 - (C) Chondrocytes (D) All of these

4. The spaces in which osteocytes are present is called;
 - (A) Osteoclast
 - (B) Sinuses
 - (C) Lacunae
 - (D) Canaliculi

5. Following are correct statements w.r.t. either bone or cartilage except one. Mark the exception.
 - (A) Presence of calcium phosphate, calcium carbonate etc. makes the matrix of bone very hard and non- pliable.
 - (B) Chondrocytes reside in spaces in the matrix called lacunae.
 - (C) Bones have hard and pliable matrix.
 - (D) Growth of cartilage occurs mainly by division of chondrocytes.

6. Cartilage is not present;
 - (A) at the tip of nose.
 - (B) in limb and hands.
 - (C) outer ear joint and between vertebral column.
 - (D) in duct of pancreas.

7. Which of the following statement is incorrect?
 - (A) The intracellular material of cartilage is solid & pliable.
 - (B) Chondrocyte are present in cavities called lacuna.
 - (C) Most of cartilage of invertebrate embryo is replaced by bone.
 - (D) Both (A) and (C)

8. Bones are mainly formed of;
 - (A) calcium and magnesium.
 - (B) calcium and phosphorus.
 - (C) calcium and sulphur.
 - (D) calcium and iron.

9. Which of the following are phagocytic in nature?
 - (A) Monocytes (B) Macrophages
 - (C) Neutrophils (D) All of these

10. Main tissue that provide structural frame work to body is;
 - (A) Cartilages (B) Blood
 - (C) Bones (D) Adipose tissue

11. Ground substance of bone is rich in;
 - (A) elastin fibres and calcium salts.
 - (B) collagen fibres and calcium salts.
 - (C) collagen fibres and sodium salts.
 - (D) elastin fibres and sodium salts.

12. Lymph differs from blood in possessing;
 - (A) more proteins and less waste products.
 - (B) less proteins and more waste products.
 - (C) more proteins and more waste products.
 - (D) less proteins and less waste products.



13. **Statement-I:** Bones have a hard and nonpliable ground substance.

Statement-II: Bones support and protect the soft tissue and organs.

- (A) Statement I and Statement II both are correct.
 (B) Statement I is correct, but statement II is incorrect.
 (C) Statement I is incorrect, but Statement II is correct.
 (D) Statement I and Statement II both are incorrect.

14. **Assertion (A):** Blood is a fluid connective tissue and the main circulating fluid.

Reason (R): Blood helps in transport of various substances.

- (A) Both Assertion (A) and Reason (R) are true, and Reason (R) is a correct explanation of Assertion (A).
 (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not a correct explanation of Assertion (A).
 (C) Assertion (A) is true, and Reason (R) is false.
 (D) Assertion (A) is false, and Reason (R) is true.

15. Match List-I with List-II to find out the correct option.

| List-I (Plasma protein) | | List-II (Functions) | |
|----------------------------|------------|------------------------|----------------------|
| I | Fibrinogen | A | Defense mechanism |
| II | Globulins | B | Osmotic balance |
| III | Albumins | C | Coagulation of blood |
| IV | Plasma | D | Straw coloured |

- (A) I-C, II-A, III-B, IV-D
 (B) I-A, II-C, III-B, IV-D
 (C) I-C, II-B, III-A, IV-D
 (D) I-B, II-A, III-C, IV-D



Answer Key

1. (A)
2. (C)
3. (A)
4. (C)
5. (C)
6. (D)
7. (D)
8. (B)

9. (D)
10. (C)
11. (B)
12. (B)
13. (A)
14. (A)
15. (A)