NSEB 11th 2026

DPP-02

Structural Organization in Animals

1. The function of the gap junction is to;
(A) stop substance from leaking across a tissue.
(B) perform cementing to keep neighbouring cells together.
(C) facilitate communication between adjoining cells by connecting the cytoplasm for rapid transfer of ions, small molecules and some large molecules.
(D) separate two cells from each other.

2. The inner surface of hollow organs are lined by;
(A) Columnar epithelium
(B) Compound epithelium
(C) Squamous epithelium
(D) Ciliated epithelium

3. Which one of the following statement is incorrect?
(A) Digestive enzymes are secreted by exocrine glands.
(B) Hormones are directly secreted into the fluid bathing the gland.
(C) Exocrine glands do not have duct.
(D) Glands are of mainly two types unicellular and multicellular.

4. Which epithelial tissue helps to move particles or mucus in a specific direction?
(A) Ciliated epithelium
(B) Columnar epithelium
(C) Glandular epithelium
(D) Squamous epithelium

5. The ciliated epithelial cells are required to move particles or mucus in a specific direction. In humans, these cells are mainly present in;
(A) fallopian tubes and pancreatic duct.
(B) eustachian tube and salivary duct.
(C) bronchioles and fallopian tubes.
(D) bile duct and bronchioles.

6. Which of the following is not secreted by exocrine glands?
(A) Earwax (B) Oil
(C) Milk (D) None of these

7. Human skin is composed of;
(A) Compound epithelium
(B) Squamous epithelium
(C) Columnar epithelium
(D) Ciliated epithelium

8. Select the incorrect statement.
(A) Multicellular glandular epithelium is formed of clusters of cells.
(B) Compound epithelium is actively involved in secretion and absorption substances.
(C) Pancreatic and salivary ducts are internally lined by compound of epithelium.
(D) None of these

9. Cell junctions;
(a) are formed in epithelial tissues.
(b) provide structural and functional link between adjacent cells of tissues.
(c) are alternatively called gap junctions. Select the most appropriate option.
(A) a, b, c are correct
(B) Only a is correct
(C) b and c are correct
(D) a and b are correct

10. Transitional epithelium is found in;
(A) Urinary bladder
(B) Ureter
(C) Both (A) and (B)
(D) PCT of nephron

11. Rapid transfer of ions, small molecules and some time big molecules occurs through;
(A) Gap junction
(B) Tight junction
(C) Anchoring junction
(D) Mechanical junction

12. Cells in an tissue are held together by;
(A) Adhering junction
(B) Gap junction
(C) Plasmodesmata
(D) Tight junction

13. **Statement-I:** Function of compound epithelium is protection against chemical stress only.
Statement-II: Compound epithelium has major role in secretion and absorption.
Choose the correct answer from the options given below:
(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):** Compound epithelium is composed of two or more layers of cells.
Reason (R): Compound epithelium has protective functions.
In the light of above statements choose the most appropriate answer from the options given below.
(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		**List-II**	
I	Tight junctions	A	Cement neighbouring cells
II	Adhering junctions	B	Transmit information through chemicals to another cells
III	Gap junctions	C	Establish a barrier to prevent leakage of fluid across epithelial cells
IV	Synaptic junctions	D	Cytoplasmic channels to facilitate communications between adjacent cells

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

Answer Key

1. (C)
2. (D)
3. (C)
4. (A)
5. (C)
6. (D)
7. (A)
8. (B)
9. (D)
10. (C)
11. (A)
12. (A)
13. (D)
14. (A)
15. (D)