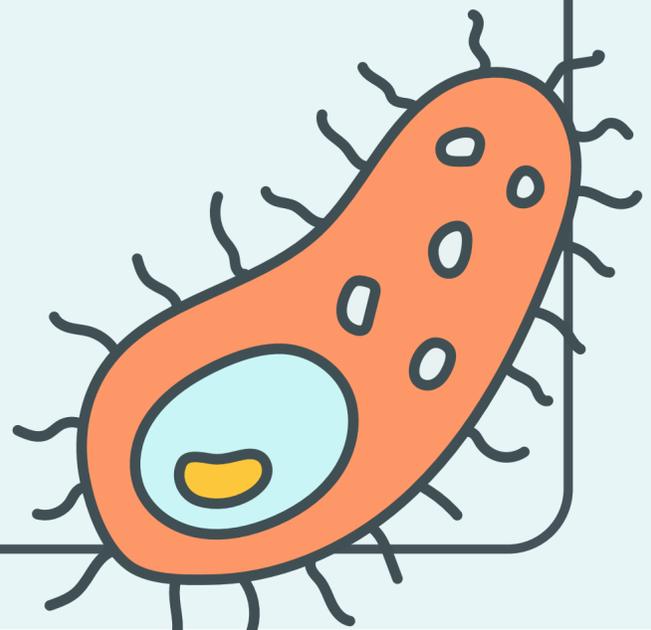
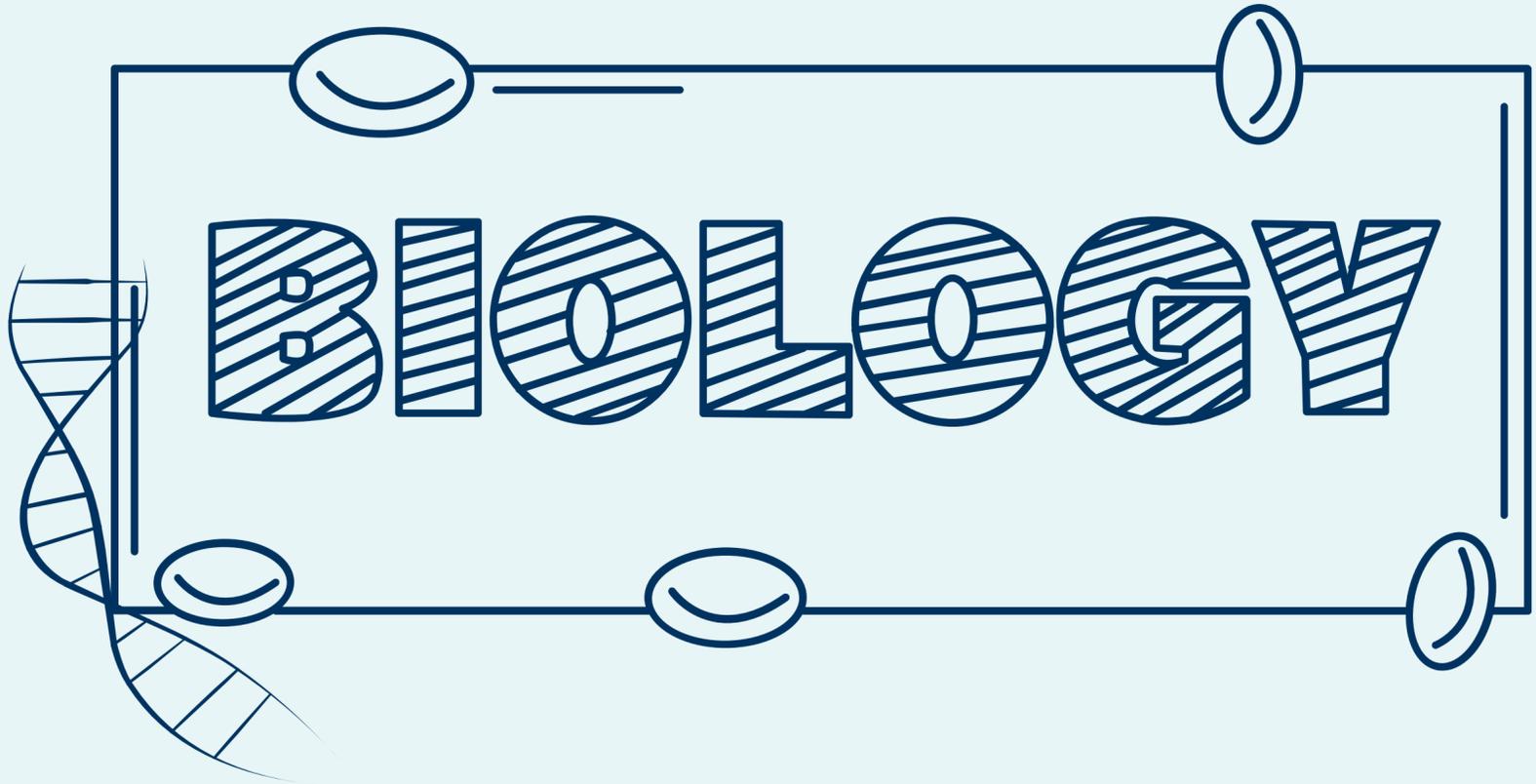


Quiz time

Lec 15



1. Which type of junction is responsible for sealing cells together to prevent the passage of molecules into the intercellular space?

- A) Gap junctions
- B) Tight junctions (Zonula occludens)
- C) Desmosomes
- D) Hemidesmosomes

Answer: B) Tight junctions (Zonula occludens)

2. Which transmembrane proteins are involved in forming the seal in Tight Junctions?

- A) Connexin
- B) Cadherins
- C) Claudin and occludin
- D) Integrins

Answer: C) Claudin and occludin

3. What is the main function of Gap Junctions (Nexus)?

- A) To provide strong mechanical attachment
- B) To seal the apical surface of cells
- C) To allow the exchange of small molecules and ions between adjacent cells
- D) To bind cells to the basal lamina

Answer: C) To allow the exchange of small molecules and ions between adjacent cells

4. Which type of anchoring junction is "belt-shaped" and encircles the apical part of the cell?

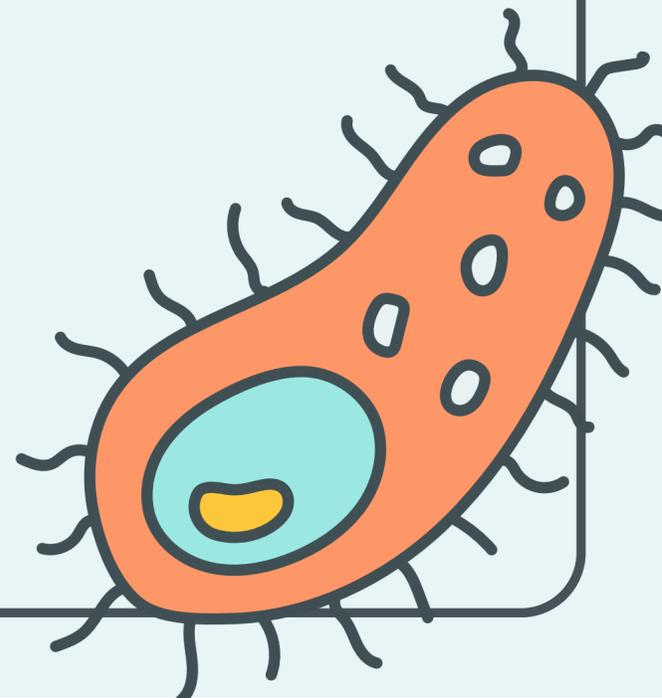
- A) Desmosomes (Macula adherens)
- B) Hemidesmosomes
- C) Zonula adherens
- D) Gap junctions

Answer: C) Zonula adherens

5. Desmosomes (Macula adherens) are attached to which part of the cytoskeleton?

- A) Actin microfilaments
- B) Intermediate filaments (keratin)
- C) Microtubules
- D) Myosin filaments

Answer: B) Intermediate filaments (keratin)



6. Which cell adhesion molecule (CAM) is responsible for cell-to-matrix adhesion by binding the cell to the basal lamina?

- A) Cadherins
- B) Selectins
- C) Integrins
- D) Immunoglobulin superfamily

Answer: C) Integrins

7. In which site are Gap Junctions particularly important for "heartbeat coordination"?

- A) Epidermis of the skin
- B) Small intestine
- C) Cardiac muscle
- D) Urinary bladder

Answer: C) Cardiac muscle

8. What happens to calcium-dependent junctions (like those containing Cadherins) if calcium is removed?

- A) They become stronger
- B) They are disrupted or separated
- C) They turn into tight junctions
- D) No change occurs

Answer: B) They are disrupted or separated

9. Which junction is described as "Half a desmosome" and binds cells to the basal lamina?

- A) Zonula adherens
- B) Gap junction
- C) Hemidesmosome
- D) Tight junction

Answer: C) Hemidesmosome

10. What is the typical intercellular space in a Gap Junction?

- A) Zero (fused)
- B) 2 nm
- C) 20 nm
- D) 30 nm

Answer: B) 2 nm

اللَّهُمَّ تَوَفَّنَا مُسْلِمِينَ، وَأَحِنَّا مُسْلِمِينَ،
وَأَلْحِقْنَا بِالصَّالِحِينَ، غَيْرَ خَزَايَا وَلَا مَفْتُونِينَ

