

Date: 14/05/2026

Duration: 01 hour

Answer the following questions by choosing ONLY ONE correct answer

1/-The ectoblast gives rise to:

- A. Digestive tract B. Skeleton C. Skin D. Cartilage E. Urinary system

2/-Non-keratinized stratified squamous epithelium:

- A. Has a cornified layer B. Is present in the skin
C. Is ciliated D. Lines the esophagus E. Is simple columnar

3/-Metaplasia is:

- A. Cell death B. Transformation of one epithelium into another.
C. Cell division D. Infection E. Apoptosis

4/- The endothelium:

- A. Is stratified B. Lines the vascular cavities
C. Is columnar D. Is keratinized
E. Is pseudo-stratified

5/-Regarding stereocilia:

- A. They are motile B. They are rich in microtubules
C. They are long immobile projections D. They are present in the bronchi
E. They ensure mucociliary transport

6/-Type I collagen fibers are :

- 1-the most widespread in the body
2-the fibers specific to the basal laminae
3-highly present in hyaline cartilage
4-present in the dermis
5-visible after silver impregnation
A-1,2 B-2,3 C-1,4 D-3,4 E-2,5

7/- At the level of the common connective tissue, the fibroblast is a cell that:

- 1- is rich in intracellular organelles
2- is a mature and relatively inactive cell
3- synthesizes the extracellular matrix
4- allows for lipid storage
5- secretes cytokines and growth factors
A-1,2,3 B-2,3,4 C-3,4,5 D-1,2,5 E-1,3,5

8/- Mucous connective tissue:

- 1- Is predominant in the submucosa
2- Is very rich in fibers
3- Is characterized by an abundance of ground substance
4- Is predominant in the uterine lining of pregnant women
5- Is found in Wharton's jelly
A-1,4 B-2,3,4 C-3,5 D-1,3,4 E-1,3,5

9/- Dense, bi-extended connective tissue is found in:

- A- Tendons B- Periosteum C- Ligaments
D- Organ capsules E- Corneal dermis

10/- Primary adipose connective tissue:

- 1- Serves to store lipids.
- 2- Is located in brown fat.
- 3- Is very abundant in the fetus.
- 4- Is located in white fat.
- 5- Can represent up to 25% of body weight in women.

A- 1,2 B- 3,4 C- 2,3 D- 4,5 E- 1,5

11/- Osteoblasts:

1. Are bone-forming cells
2. Have cytoplasm rich in intracytoplasmic organelles
3. Reside in osteoplasts
4. Are left at rest in the form of osteocytes
5. Are slender cells with a brush border.

A-1,2 B-1,3 C-2,4 D-2, 4,5 E-1,5

12/- The endosteum:

- A. Allows for the longitudinal growth of the bone
- B. Contains Sharpey's fibers
- C. Lines the periphery of the bones
- D. Lines the articular surfaces
- E. Lines the walls of the vascularized cavities of bones

13/- Haversian Canals:

1. Are transverse canals
2. Connect the Volkmann's canals to the periosteum
3. Are longitudinal canals
4. Allow the passage of blood vessels
5. Are interstitial systems.

A-1,2 B-1, 2,3 C-3, 4,5 D-3,4 E-4,5

14/-Enchondral ossification :

- A. Occurs in a connective tissue model
- B. Occurs in a cartilaginous model
- C. Begins at the epiphyses
- D. Is a periosteal ossification
- E. Ensures the growth in thickness of long bones.

15/- Lamellar bone tissue is characterized by :

- 1- Regular bone lamellae
- 2- Irregular orientation of collagen fibers
- 3- Very high mineralization
- 4- A large number of dispersed osteocytes
- 5- Osteoblasts located between the lamellae.

A-1, 2,3 B-2,3 C-3, 4,5 D-1, 3 E-4,5

16/-In the striated muscle cell, the triad is formed by :

- A. One T-tubule and one terminal cisterna.
- B. Three successive T-tubules.
- C. Three myosin filaments.
- D. Two T-tubules and one terminal cisterna.
- E. One T-tubule flanked by two terminal cisternae of the sarcoplasmic reticulum.

17/-Type II muscle fibers (white fibers) are characterized by:

- A. Having the highest myoglobin content.
- B. Having the highest content of mitochondria and redox enzymes.
- C. Rapid contraction and significant fatigue.
- D. Scarcity of contractile myofibrils.
- E. The absence of neuromuscular spindles.

18/-During the contraction of striated muscle fibers, the troponin subunit that binds calcium is:

- A. Troponin C (TnC)
- B. Troponin I (TnI)
- C. Troponin T (TnT)
- D. F-actin
- E. G-actin

19/-Intercalated Discs (Traits Scalariformes):

- A. They are lines of intercellular junctions composed solely of tight junctions.
- B. Actin filaments terminate at their level and associate with the sarcolemma.
- C. They are extensions of the smooth endoplasmic reticulum.
- D. They block the passage of membrane excitation.
- E. None of the answers is correct.

20/-In comparison to other muscle types, skeletal striated muscle is characterized by:

- A. Involuntary and rapid contraction.
- B. Mononucleated and fusiform cells.
- C. Multinucleated skeletal muscle cells (rhabdomyocytes) under voluntary control.
- D. The absence of actin and myosin filaments.
- E. Cells connected by Eberth's intercalated discs.

21/-Erythrocytes (red blood cells) are characterized by:

- A. A lifespan of 200 days.
- B. An oval and nucleated shape.
- C. A role in humoral defense (immunoglobulins) and cellular defense.
- D. Cytoplasm containing large basophilic granules.
- E. A biconcave disc shape.

22/-Regarding neutrophil polymorphonuclear cells:

- A. They have a single nucleus with several lobes.
- B. A cytoplasm devoid of granules.
- C. Anucleated cell fragments.
- D. A population representing 1% of total leukocytes.
- E. The capacity to produce immunoglobulins.

23/-Hyalin cartilage is:

- 1-located primarily in the auricle of the ear
- 2-formed by type II collagen fibers
- 3-the most abundant in the body
- 4-present in the articular menisci
- 5-formed of a thick network of type I collagen fibers

- A-1,2
- B-3,4
- C-2,3
- D-4,5
- E-1,5

24/-Elastic cartilage is found in all these locations except one. Which one?

- A-The larynx
- B-The epiglottis
- C-The external auditory canal
- D-The auricle (or pinna)
- E-The Achilles tendon

25/-Fibrocartilage is:

- 1-stainable histologically with Masson's trichrome
- 2-rich in type I collagen fibers
- 3-present in intervertebral discs
- 4-rich in type II collagen
- 5-represented primarily by articular cartilage

A-1,2,4

B-2,3,4

C-1,2,3

D-1,3,5

E-3,4,5

26/-What type of glial cell produces myelin in the central nervous system?

- A.Oligodendrocytes
- B.Astrocytes
- C.Schwann cells
- D.Microglia
- E.Neurons

27/-Ependymal cells line:

- A.Blood vessels
- B. Cerebral ventricles
- C. Peripheral nerves
- D. White matter
- E. Spinal ganglia

28/-A pentalamellar junction corresponds to :

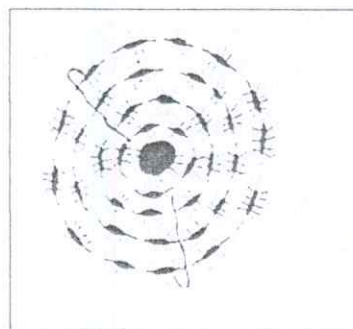
- A. Desmosome
- B. Tight junction
- C. Hemidesmosome
- D. Intermediate junction
- E. Interdigitation

29/-Merocrine secretion corresponds to:

- A.exocytosis without cellular alteration
- B.total cell destruction
- C. partial loss of cytoplasm
- D.apoptosis
- E. Endocrine secretion

30/-This diagram represents:

- A. an external fundamental system
- B. an internal fundamental system
- C. an incomplete osteon
- D. a Haversian system
- E. an interstitial system.





Les bords contiennent de petits carrés noirs pour la lecture automatique. Ne pas raturer !

ABBES LAGHROUR University Khenchela - Faculty of medicine

Khenchela, le Jeudi 14 Mai 2026

EMD 1 de Histologie (Première Année de Médecine : 2025-2026)

Nom:

Prénom:

Salle/Place / Date de naissance: / /

Matricule

Ce sujet contient 30 QCM

A B C D E

1. ☐ ☐ ☒ ☐ ☐
2. ☐ ☐ ☐ ☒ ☐
3. ☐ ☒ ☐ ☐ ☐
4. ☐ ☒ ☐ ☐ ☐
5. ☐ ☐ ☒ ☐ ☐
6. ☐ ☐ ☒ ☐ ☐
7. ☐ ☐ ☐ ☐ ☒
8. ☐ ☐ ☒ ☐ ☐
9. ☐ ☐ ☐ ☐ ☒
10. ☐ ☐ ☒ ☐ ☐

A B C D E

11. ☒ ☐ ☐ ☐ ☐
12. ☐ ☐ ☐ ☐ ☒
13. ☐ ☐ ☐ ☒ ☐
14. ☐ ☒ ☐ ☐ ☐
15. ☐ ☐ ☐ ☒ ☐
16. ☐ ☐ ☐ ☐ ☒
17. ☐ ☐ ☒ ☐ ☐
18. ☒ ☐ ☐ ☐ ☐
19. ☐ ☒ ☐ ☐ ☐
20. ☐ ☐ ☒ ☐ ☐

A B C D E

21. ☐ ☐ ☐ ☐ ☒
22. ☒ ☐ ☐ ☐ ☐
23. ☐ ☐ ☒ ☐ ☐
24. ☐ ☐ ☐ ☐ ☒
25. ☐ ☐ ☒ ☐ ☐

A B C D E

26. ☐ ☐ ☐ ☐ ☐
27. ☐ ☐ ☐ ☐ ☐
28. ☐ ☒ ☐ ☐ ☐
29. ☒ ☐ ☐ ☐ ☐
30. ☐ ☐ ☐ ☒ ☐

- Chaque Question sur 0.71
- ajouter 10, 12 points tout les
étudiants pour que
la note soit sur 20



Dr. Dahmani

