



**Practical Exam of Histology (102 z) May 2020**

**1<sup>st</sup> year Biology students (credit hours)**

**(37 marks)**

**Q1) Complete the following sentences:**

**(15 marks)**

- 1- A ..... may be defined as an aggregate of more or less similar cells, which perform one function or more.
- 2- The epithelial tissues are characterized by resting on a....., in the majority of cases.
- 3- In areolar connective tissue, there are..... cells which secrete the ground substance.
- 4- At the periphery of the cartilage, there is a fibrous membrane which is named .....
- 5- In the dense bone, among the rings of lacunae lie rings of very thin ....., which compose the matrix.
- 6- The ..... muscles are usually found in the walls of the viscera and work without the interference of the will of the animal.
- 7- Each striated muscle fibre is surrounded by a thin structureless membrane called .....
- 8- The neighbouring cardiac muscle fibres unite to form a .....

- 9- In the liver of the pig, each ..... contains a branch of the portal vein, a branch of the hepatic artery, and a bile ductule.
- 10- In the kidney of the toad, the collecting tubules pour the urine into the ....., which extends along the lateral border of the kidney.
- 11- The single chondrocyte or group of chondrocytes lie in a clear .....
- 12- The stratified squamous epithelium consists of epitheliocytes arranged in strata and its function is to ..... the surface on which it lies.
- 13-The ..... are of two categories: lymphocytes and macrophages.
- 14-Spermatozoa are always in clusters and connected to ..... cells, which reach the periphery of the seminiferous tubule.
- 15-..... muscles are long, spindle-shaped cells, which have pointed ends and thickened central parts housing the nuclei.

**Q2) Answer the following:**

**(10 marks)**

- 1- Identify this section.
- 2- Draw the tissue by your hands with a complete labelling. Scan your hand drawing and past it here.



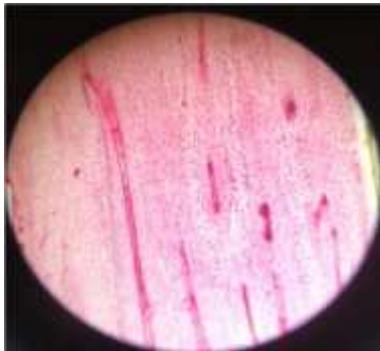
**Q3) Mention the name(s), function(s), and the composition of the gland(s) in the skin of the toad. (6 marks)**

**Q4) Mention the name and the composition of structural unit of each the following: (6 marks)**

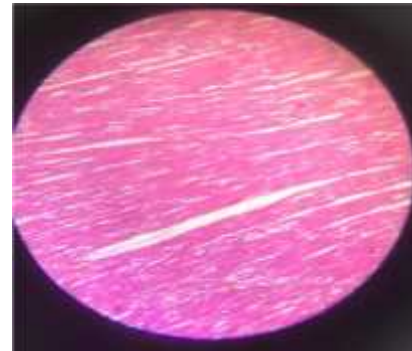
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2



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**Examiner:**

**Prof. Ahmed M. Ghoneim**