



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

DEGREE

AML 4303 : HISTOLOGY

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Dec 2016

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt ALL questions.

Circle the correct answer in section A.

Section A

1. The following are cytoplasmic organelles except
 - a. Plasma membrane
 - b. Mitochondria
 - c. Karyosome
 - d. Ribosomes
 - e. Rough endoplasmic reticulum
2. The following are components of a differon except
 - a. Stem cell
 - b. Progenitors
 - c. Immature cells
 - d. Precursors
 - e. Mature cells

3. Which of the following is not a stage of mitosis
 - a. Anaphase
 - b. Telophase
 - c. Leptophase
 - d. Telophase
 - e. Prophase
4. Biopsies are obtained from
 - a. Cadevers
 - b. Corpses
 - c. Morges
 - d. Cementry
 - e. Patients
5. Which of the following is not an epithelial cell
 - a. Squamous
 - b. Basement membrane
 - c. Keratinized cell
 - d. Goblet cell
 - e. Superficial cell
6. Stratified Squamous epithelium covers all of the following organs except
 - a. Vagina
 - b. Skin
 - c. Cornea
 - d. Urethra
 - e. Mouth
7. The epithelium that lines cavities that are subject to great influctuations in size by contraction and stretching is called
 - a. Simple ciliated columnar epithelium
 - b. Pseudostratified ciliated epithelium
 - c. Transitional epithelium
 - d. Stratified columnar epithelium
 - e. Pseudostratified columnar epithelium
8. Which of the following is not a cell organelle
 - a. Mitochondria
 - b. Mucin
 - c. Golgi apparatus
 - d. Endoplasmic reticulum
 - e. Cilia
9. The major role of histology in hospitals is
 - a. Testing new drugs
 - b. Blood transfusion
 - c. Diagnostic services
 - d. Medical legal services
 - e. Prescription service

10. Which of the following is a function of the cell
 - a. Hereditary transfer
 - b. Metabolic process
 - c. Diffusion
 - d. Infiltration
 - e. Protection
11. A group of cells performing a similar function is called
 - a. An organ
 - b. System
 - c. Body
 - d. Tissue
 - e. Organism
12. Histology is majorly divided into two parts namely
 - a. Organology and tissue study
 - b. Histology and histopathology
 - c. Animal and plant histology
 - d. Histology and cytology
 - e. Human anatomy and physiology
13. The following are cytoplasmic inclusions except
 - a. Glycogen
 - b. Mucin
 - c. Centrioles
 - d. Yolk
 - e. Vacuoles
14. Mitosis is a process of cell division, it's also known as
 - a. Karyolysis
 - b. Karyorrhexis
 - c. Karyokinesis
 - d. Pyknosis
 - e. Cytolysis
15. The cellular organelle that is concerned with metabolism is
 - a. Centrioles
 - b. Golgi body
 - c. Nucleus
 - d. Mitochondria
 - e. Rough endoplasmic reticulum
16. The disappearance of the nucleus during autolysis is also known as
 - a. Karyokinesis
 - b. Karyolysis
 - c. Pyknosis
 - d. Cytolysis
 - e. Karyorrhexis

17. The cellular organelle that is involved in protein synthesis is called
- Ribosomes
 - Golgi apparatus
 - Endoplasmic reticulum
 - Lysosomes
 - Mitochondria
18. Which of the following is the largest gland in the body
- Endocrine
 - Pancrease
 - Lung
 - Liver
 - Pituitary
19. Which of the following is not a layer of the walls of the ureter
- Outer mucus coat
 - Inner mucus coat
 - Mucus coat
 - Middle mucus coat
 - Outer fibrous coat
20. The connective tissue which surrounds an individual cardiac muscle fibres is called
- Pericardium
 - Endocardium
 - Myocardium
 - Epicardium
 - Endomysium
21. All the following statements are true of sarcomere except
- Is a segment of myofibrils between two adjacent Z lines
 - It is the contractile unit of the muscle
 - It shortens when the muscle contracts
 - Is a segment of myofibrils at the end of the Z lines
 - The A band is present at the centre of a sarcomere
22. The epithelium of the oral cavity rests on lamina propia which consists of
- Smooth muscles
 - Connective tissue
 - Cardic muscles
 - Muscle tissue
 - Nervous tissue
23. On gross appearance the tongue has two surfaces namely
- Ventral and dorsal
 - Oral mucosa and palate
 - Filiform and fungiform
 - Front and back
 - Left and right

24. The following make up the layers of the gastrointestinal tract except
- Muscularis externa
 - Serosa
 - Mucosa serosa
 - Adventitia
 - Submucosa
25. The oesophagus is a long muscular tube that approximately measures
- 50 cm
 - 100 cm
 - 10 cm
 - 25 cm
 - 5cm
26. The following are spermatogenic cells except
- Spermatogonia
 - Preliminary spermatocytes
 - Secondary spermatocytes
 - Primary spermatocytes
 - Spermatids
27. Which cell produces testosterone
- Spermatozoa
 - Sertoli cells
 - Spermatids
 - Leydig cells
 - Spermatocytes
28. During pregnancy which hormone maintains the corpus
- FSH
 - LH
 - HCG
 - Estrogen
 - Progesterone
29. What type of epithelial cells are as tall as they are wide
- Simple
 - Cuboidal
 - Squamous
 - Columnar
 - Stratified
30. Which of the following structure contains the oocyte
- Follicle
 - Germinal epithelium
 - Medulla
 - Tunica
 - Cortex

Section B

31. a) Discuss Leblon's classification of tissues (10 marks)
b) Compare the microscopic features of skeletal, cardiac and smooth muscles (10 marks)
32. a) With the aid of diagrams, discuss cell division by mitosis (10 mark)
b) Describe the histology of the skin (10 marks)

