



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS AND NAIROBI CENTRE

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

FIRST YEAR FIRST TRIMESTER EXAMINATION

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN HEALTH PROFESSIONS EDUCATION**

COURSE CODE: NUR 101

COURSE TITLE: HUMAN ANATOMY I

DATE: Wednesday, 28th February 2018

TIME: 9: 00 Am - 12:00 Noon

INSTRUCTIONS TO CANDIDATES

Question ALL Questions

Section A: Multiple Choice Questions (MCQ)

20 Marks.

Section B: Short Answer Questions (SAQ)

40 Marks.

Section C: Long Answer Question (LAQ)

40 Marks.

TIME: 3 Hours

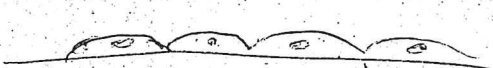
MMUST observes ZERO tolerance to examination cheating

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Section A : Multiple Choice Questions (20 Marks)

Choose the correct choice, only one choice is correct

1. The functional unit of a muscle fiber is the
 - a. Sarcomere
 - b. Myofibrils
 - c. Myofilament
 - d. Neuromuscular junction
2. Which plane of section would divide the body into anterior and posterior portions?
 - a. horizontal
 - *b. midsagittal
 - c. transverse
 - d. coronal
3. Which of the following are subdivisions of the dorsal cavity?
 - *a. abdominal and pelvic cavities
 - b. thoracic and abdominopelvic cavities
 - c. cranial and spinal cavities
 - d. pleural and pericardial cavities
4. Pain in the left upper abdominopelvic quadrant might more precisely be emanating from which of the following?
 - a. left iliac region
 - b. left hypochondriac region
 - c. gall bladder
 - d. vermiform appendix
5. Epithelial tissue is characterized by each of these traits, except that
 - a. it lacks blood vessels
 - b. it functions in secretion, absorption, and excretion
 - *c. epithelial cells are loosely packed and have much intercellular material
 - d. it is anchored to a basement membrane
6. Microvilli, which function to increase surface area, are more likely to be found in _____ epithelium.
 - a. simple cuboidal
 - *b. simple squamous
 - c. transitional
 - d. simple columnar
7. Epithelium that appears layered due to the varying levels at which nuclei are found in cells, but in reality is not layered, is _____.
 - a. transitional epithelium
 - *b. pseudostratified columnar epithelium
 - c. stratified squamous epithelium
 - d. stratified columnar epithelium



- 8. The outer layer of the skin is composed of _____
 - a. Transitional epithelium
 - b. pseudostratified columnar epithelium
 - c. stratified squamous epithelium
 - d. stratified columnar epithelium
- 9. What type of epithelium lines the urinary bladder and is capable of distention?
 - a. stratified cuboidal epithelium
 - b. stratified squamous epithelium
 - c. transitional epithelium
 - d. stratified columnar epithelium
- 10. Connective tissues are somewhat similar to epithelial tissues in all of these characteristics except _____
 - a. they have abundant intercellular material
 - b. they can usually reproduce themselves
 - c. they often serve more than one function
 - d. they occur throughout the body
- 11. The type of cartilage found in intervertebral disks of the spinal column is _____
 - a. hyaline cartilage
 - b. elastic cartilage
 - c. white cartilage
 - d. fibrocartilage
- 12. Neuroglial cells help neurons in each of these ways, with the exception of _____
 - a. supporting and binding nervous tissue
 - b. carrying on phagocytosis
 - c. playing a role in cell-to-cell communications
 - d. transmitting nervous impulses
- 13. Which of the following is not one of the four major tissues?
 - a. epithelial
 - b. connective
 - c. nervous
 - d. skeletal muscle
- 14. The only tissue specialized for movement is the _____ tissue.
 - a. nervous
 - b. cardiac muscle
 - c. muscle
 - d. connective
- 15. The cells lining blood vessels and the lung alveoli are classed as _____ epithelium.
 - a. columnar
 - b. stratified squamous
 - c. squamous
 - d. cuboidal

16. Connective tissue is complex because it has a variety of cells and a noncellular background called a _____ surrounding them.

- a. collagen
- b. elastin
- c. mucous secretion
- d. matrix

17. Which process in the third week of development converts the embryonic disc into the trilaminar embryo

- a. Neuralation
- b. Gastrulation
- c. Placentation
- d. Somatogenesis

18. Implantation of the blastocyst begins

- a. 6-7 days after ovulation.
- b. 1 day after ovulation.
- c. 3 days after ovulation.
- d. 2 weeks after ovulation.

19. The cells of the blastocyst that become the embryo proper are the

- a. Corpus luteum.
- b. blastomeres.
- c. trophoblast.
- d. inner cell mass.

20. The first week of human development is characterized by formation of the:

- a. inner cell mass.
- b. trophoblast
- c. blastocyst
- d. all of the above

Polarity
apical to basal membrane
Regenerate
- Supplimental connective
and red for the blastocyst
by amniotic cavity
- Epithelial
- Its function

1. Chorionic cavity
2. Intervillous cavity
3. Amniotic cavity
4. Decidua
Cotyledon
Mucosa

Section B: Short Answer Questions (40 Marks)

- 1. Describe the levels structural organization of human body (8 marks).
- 2. Describe the major linings and coverings if the body (5marks)
- 3. Explain special characteristics of epithelial cells (5marks)
- 4. Explain the main structures of the female external reproductive organs (8 marks)
- 5. Describe the blood vessel that serves the myocardium (6 marks)
- 6. Explain the significant bone markings (8marks)

1. Epithelium
2. Connective tissue
3. Muscle
4. Nervous tissue
5. Cartilage
6. Bone

Section C: Long Essay Questions (40 Marks)

- 1. Discuss the major embryological developmental stages from fertilization to birth (20 marks)
- 2. Describe the structural layers of the skin (20 marks).