



(University of Choice)

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

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

SECOND YEAR, SECOND TRIMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF SCIENCE IN PHYSIOTHERAPY**

COURSE CODE: BSP 211

COURSE TITLE: ADVANCED HUMAN ANATOMY

DATE: -----

TIME: -----

INSTRUCTIONS TO CANDIDATES

This paper consists of three sections:

- i. Section A – Multiple Choice Questions
- ii. Section B – Short Answer Question
- iii. Section C – Long Answer Question.

Answer all questions

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

*OK
moderated 27/1/2018
OK*

Section A: Multiple Choice Questions (20 marks)

Choose the most suitable choice, only one choice is correct

1. Damage to which lobe can produce disruption to social and emotional behavior?
 - a. Occipital lobe
 - b. Frontal lobe
 - c. Temporal lobe
 - d. Parietal lobe
2. A neurotransmitter found in peripheral synapses is
 - a. Dopamine
 - b. Acetylcholine
 - c. Glutamate
 - d. GABA
3. The hypoglossal nerve _____.
 - a. Supplies all the muscles of the tongue
 - b. Carries taste sensation to the tongue
 - c. Supplies all the muscle of the nose
 - d. Controls the secretion of saliva in the mouth
4. The nucleus of the limbic system includes all of the following except _____.
 - a. Amygdala
 - b. Red nucleus
 - c. Hippocampus
 - d. Olfactory bulbs
5. The _____ contains centers for heartbeat, breathing, and blood pressure.
 - a. Cerebellum
 - b. Cerebrum
 - c. Spinal cord
 - d. Medulla oblongata
6. Most of the respiratory passages surfaces are lined with:
 - a. Pseudostratified stratified epithelium
 - b. Simple columnar cells
 - c. Stratified squamous
 - d. Ciliated epithelium
7. The carina separates the _____ from each other
 - a. Lungs
 - b. Secondary bronchi
 - c. Primary bronchi
 - d. Trachea and the bronchi
8. The pleural cavity is the space between the visceral pleura and _____.
 - a. Lung
 - b. Thoracic wall

- c. Parietal pleura
 - d. Mediastinum
9. The ligament that supports the ovary from the posterior surface of the broad ligament is?
- a. Mesosalpinx
 - b. Mesovarium
 - c. Round ligament
 - d. Ovarian ligament
10. Collectively the female external genital organs are called
- a. Labia majora
 - b. Mons pubis
 - c. Vulva
 - d. Clitoris
11. Generally the gastrointestinal tract is made up of the following layers except?
- a. Mucosa
 - b. Serosa
 - c. Muscularis
 - d. Sub muscularis
12. The point of exit from the stomach where it joins the small intestines is guarded by? :
- a. Sphincter of Oddi
 - b. Cardiac sphincter
 - c. Pyloric Sphincter
 - d. Greater Omentum
13. What is the endocardium?
- a) The lining of the heart on the outside
 - b) The lining of the heart on the inside
 - c) The middle lining
 - d) None of the above
14. What part is not part of the small intestines is the _____
- a. Cecum
 - b. Duodenum
 - c. Jejunum
 - d. Ileum
15. The ampulla of Vater is the area that joins the common bile duct to the _____ duct
- a. Hepatic

- b. Pancreatic
 - c. Common hepatic
 - d. Cystic
16. The Retromammary space is found between?
- a. The thoracic wall and the pectoral muscle
 - b. The mammary glands
 - c. Pectoral muscle and the mammary gland
 - d. Serratus anterior and the mammary gland
17. What is the tuft of capillaries that brings blood to the kidney for filtration?
- a. Glomerular capsule
 - b. Bowman space
 - c. Proximal arteriole
 - d. Glomerulus
18. How many chambers are there in the heart?
- a. 2
 - b. 4
 - c. 6
 - d. 1
19. The largest amount of lymph in the mammary gland drains into which group of lymph nodes significant
- a) Apical group
 - b) Pectoral group
 - c) Parasternal group
 - d) Subareolar group
20. The falciform ligament divides the liver into
- a) Right and left lobe
 - b) Quadrate lobe and caudate lobe
 - c) Caudate process and caudate lobe
 - d) Hepatic segments

Section B: Short Answer questions (40 marks).

1. Explain the somatic sensory pathway (8marks).
2. What are the organs found in the peritoneal space (8 Marks)
3. Describe the Pelvic diaphragm, its muscle attachments, relations, nerves and vessels.
(8 marks)
4. Describe the anatomical organization of the heart and its major blood vessels you may use a diagram (8Marks).

5. Draw and describe the organization of the urinary system (8 marks)

Section C: Long Answer Questions (40 marks).

1. Using a well labeled diagram describe the structural parts of a kidney including the nephron (20 marks).
2. With the aid of well labelled diagramme, discuss the structural organization of the male reproductive system (20 Marks)

BSP 211 ADVANCED HUMAN ANATOMY (Units)

Purpose of the Course

This course is designed to enable the students describe the structure and relative locations of various organs of the human body and consequently explain their functional significance in health and disease.

Expected Learning Outcomes

To provide students with working knowledge of the structure of the human body as the foundation for their clinical studies.

To understand the topographical and functional anatomy of the thorax, abdomen pelvis and the CNS

To understand the pay particular attention to osteology, myology, neurology, angiology and viscerology encompassing cardiovascular, respiratory, nervous, digestive and urogenital systems systems, internal organs, cavities and their relationships

To identify the topics on musculoskeletal and neurological systems, understand their structure, physiology, and their importance to physiotherapy.

Course Content:

Neuro Anatomy: Organization of Central Nervous system – Spinal nerve and autonomic nervous system: Central Nervous System; Cranial nerves; Spinal segments and areas; Brain Stem; Cerebellum, Inferior colliculi; Superior colliculi; Thalamus; Hypothalamus; Corpus striatum; Cerebral hemisphere; Blood supply to the brain; Basal ganglia; The pyramidal system; Pons, medulla extra pyramidal systems; Anatomical integration; Peripheral nervous system; Peripheral nerves; Neuromuscular junction; Sensory and organ.

Thorax: Thoracic cage, intercostals spaces, and divisions and recesses of pleura. Lungs; features, relations, lobes bronchopulmonary segments and blood vessels.

21

Pericardium; layers, relations, nerve and blood supply. Heart; surface landmarks, external features, interior of the chambers, conducting system and coronary blood vessels; Mediastinum, subdivisions contents and relations. **Breast:** features, blood supply and lymphatic drainage.

Scapular region and shoulder joint complex. **Abdomen and its organs:** Surface landmarks, regions,

anterior wall layers, nerves and vessels. Inguinal canal; boundaries and contents. Peritoneum; folds mesenteries, cavities and recesses. Abdominal organs; features, relations, blood supply, nerves and lymphatic. Abdominal organs – liver, spleen, pancreas; features, relations, blood supply, nerves and lymphatics. Posterior wall; muscles, aorta, inferior vena cava, thoracic duct, lumbar plexus and the sympathetic chains. Diaphragm; attachments, openings, nerves and vessels. **Pelvis:** Walls and dimensions, male and female bony pelvis. Pelvic diaphragm, attachments, relations, nerves and vessels. Perineum; urogenital triangle, external genitalia, anal

canal and ischiorectal fossae. Urinary bladder surfaces, relations, blood, nerve and lymphatics supply. Rectum; relations, blood, nerve and lymphatics supply. Uterus, Ovaries and vagina; features, position, relations, vessels and nerves. Prostate; lobes, capsule, relations, vessels and nerves. Male and female urethra; parts and features. Seminal vesicles; position and features. Sacral plexuses and the pelvic vessels.

Respiratory tissue; structure of the nasal cavity, larynx, trachea, the bronchial tree and alveoli.
Systems: Circulatory system; organization of the blood vessels and the heart. Lymphatic tissue; organization of the lymph nodes, tonsils, thymus and the spleen. Digestive system; major mucosal cell types, hepatobiliary structures and pancreas. Urinary system; structure of the uriniferous tubules, ureters, the urinary bladder and urethra. Genital system; gonads, gametes, seminiferous tubules and the interstitial cells. Organisation of genital ducts, uterus and vagina. Organisation of the prostate, seminal vesicles and the bulbourethral glands.

Practicals

Demonstration of osteology, myology, neurology, angiology and viscerology encompassing cardiovascular, respiratory, nervous, digestive, reproductive and urogenital systems in a cadaver
Head and Spinal Cord, Neck and Brain including Surface Anatomy

Demonstration of the of organs, blood vessels, innervation in thorax, abdomen and pelvis cavities in a cadaver

Cranial nerves, spinal nerves and points of palpation of nerves and arteries.

Mode of Delivery

Lectures

Tutorial

Practicals

Discussions

Instructional Material

Audio-visual Aids

Videos / DVD

Chalkboards.

Course Assessment

Continuous assessment 30%

Examination 70%

Core Reading Materials

Moorie (Kieth LJ) Clinically Oriented Anatomy. Ed.3, Williams and Wilkins, Baltimore, 1992

Snell (Richard SJ.) Clinically anatomy for medical student: Ed.5. Little Brown and Company Boston 1995.

Recommendation Reference Materials

Romanes (GJ) Cunningham manual of practical anatomy: upper and lower limb
Ed 15 Vol I Oxford Medical Publication, Oxford 1996.

Romanes (GJ) Cunningham manual of practical anatomy: Thorax and abdomen ed 15 Vol II
Oxford Medical Publication, oxford 1996.

Romanes (GJ) Cunningham manual of practical anatomy: Head and Neck and Brain ed 15 Vol Ii
Oxford Medical Publication, Oxford 1996.

READER'S COMMENTS FOR TIMOTHY CHIKASIRIMOBI

TOPIC: KNOWLEDGE, ATTITUDE, PERCEPTION OF CONTACT LENS WEAR AMONG ADULTS WITH REFRACTIVE ERRORS IN MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY, KAKAMEGA , KENYA

General comments

1. Congratulations to the candidate
2. The topic is viable and current
3. The abstract should be the executive summary of the whole document
4. The general lay out of the document should comply with university template (fond , margins , , reference format etc)
5. The candidate to check on Typos and punctuations by proof reading the work.
6. Other comments are indicated in the text.

Specific comments

Abstract

- Include background of the study
- Basis for further research as a significance

Chapter 1:

- Use either background or introduction as common practice. the information under introduction is repeated in its various subtopics of the document
- Last Paragraph page 2: the information here to be captured in the significance of the study
- Problem statement not explicit
- Research objectives and objectives should be numbered
- Study gap not clear
- Content of 1.4.3 up to 1.6 be taken to chapter 3

Chapter 2

- From the literature reviewed clearly show the gap the study is filling
- The literature should give the global outlook then narrow down to local situation
- 2.1 should show background of lens technology (not background of literature review)

- 2.1.4 too brief
- 2.15 too brief
- 2.2 not supported
- 2.3 – information on page 22 not part of HBM theory
- 2.5 summary should give the gap

Chapter 3

- Use a standard template of methodology (location of the study, sample size, sampling procedure, validation of research tools, data collection, ethical considerations etc)
- Justify choice of study location

All the best. Good luck

