AKOBUNJU RICHARD
WELFARE DIRECTOR

DEPARTMENT OF HUMAN ANATOMY, ABIA STATE UNIVERSITY, UTURU, FIRST SEMESTER EXAMINATION. EMBRYOGENESIS (ANA 231).

09/02/2021
Time allowed:
1hr, 15mins

Section A

1. Conversion of germ cells into gametes is known as ----------?
2. ---------- Group of cells produces testosterone necessary for spermatogenesis?
3. Sexual arousal is under the influence of the ---Hypothalamus
4. ---------- follicular gland produces estrogen? Theca internal
5. The corpus luteum is derived from ----------
6. The 8-cell stage occurs approximately at what time after fertilization?
7. The binding of spermatozoa with the zona pellucida is facilitated by ---------- proteins?
8. Any chromosome number that is not exact multiple of "n" is termed --Euploid
9. The remnant of the notochord in man is ----------
10. Cri-du-chat syndrome occurs as a result of ----------
11. CNS ------ process ensures the formation of the brain and spinal cord?
12. Urine is used to detect pregnancy when testing for ---------- ? B-cell
13. The notochord migrates ---------- through the notochordal canal.
14. The primitive streak appears at what time ----------
15. A man is said to have low sperm count when ---------- happens?
16. Klinefelter syndrome condition results in an abnormal male?
17. Progesterone is produce by ----------gland?
18. Mongolism occurs as a result of? ----------
19. a congenital anormaly that is associated with two or more nipple is termed ----------
20. chromosomal abnormality that is associated with paternal chromosomes is thermed ----------?
21. ---------- is the only monosomy campactible with life? Turner Syndromes

Section B

(Answer any 4 questions, diagram is an added advantage)

1. Explain placental membranes in dizygotic twins.
2. Describe the term erythroblastosis feutalis.
3. Explain in details Neurilation and its derivatives.
4. Describe how the notochord is formed and its fate.
5. Write extensively on the bilaminar germ layer.
6. Discus briefly on chromosomal abnormalities.
7. Write short notes on the following ;
   - i) Cleavage
   - ii) Blastocyst formation
   - iii) Corpus luteum
   - iv) Vasculogenesis
   - v) contraception

B-cell OF

AKOBUNDU RICHARD

DEPARTMENT OF MEDICAL LABORATORY SCIENCE, ABIA STATE UNIVERSITY, UTURU,
FIRST SEMESTER EXAMINATION.
BASIC HISTOOGY (ANA 221).

08/02/2021
Time allowed: 1hr, 30mins

Section A (20 marks)

1. The branch of Anatomy that is aided with microscope is known as ----------?
2. The basic contractile unit of a skeletal muscle is known as ----------
3. The functional unit of the nervous tissue is ----------
4. ---------- Epithelium lines the penile urethra?
5. ---------- synthesizes all connective tissue fibres and cells in the body?
6. The cell membrane is ----------layered?
7. ---------- is the apical specialization of the epithelium of the skin?
8. ----------is the function of microvilli in the small intestine?
9. ---------- Epithelium lines the head of the epididymis?
10. Macrophages in bones are called ----------
11. Type II collagen fibres are found in ---------- part of the body?
12. Proteoglycan is an example of ---------- in connective tissues?
13. The soma of a unipolar neuron is found where in the body?
14. Information transfer in a bipolar neuron is ----------?
15. A condition that involves the progressive loss of bone density is termed ----------
16. Cerebrospinal fluid is produced by ----------
17. Nerve cells in the brain and spinal cord are different from peripheral nerves because of the presence of ----------?
18. The epithelia lining of the labia minora of the vagina is ----------
19. ---------- Type of fibres is found within the endomysium of skeletal muscles?
20. The structural and functional subunit of the muscle fibre is the ----------?

Section B (50 marks)

Answer all questions.

1. With your knowledge of the nervous tissue, describe the glia cells of the nervous system.
2. Write short note on the following;
   a) Transitional epithelium
   b) Macrophages
   c) Type III collagen fibres
   d) Holocrine secretion
   e) Endothelium
3. With a detail explanations differentiate between a loose connective tissue and dense connective tissues.
4. Explain briefly the process of bone formation.

Basement membrane

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FACULTY OF MEDICAL LABORATORY SCIENCE
COLLEGE OF MEDICINE AND HEALTH SCIENCES
ABIA STATE UNIVERSITY, UTURU

COURSE TITLE: HISTOCHEMISTRY.

COURSE CODE: ANA 241

TIME: 2HRS.

INSTRUCTION: ANSWER QUESTION (1) AND ANY OTHER (3) ONLY.

1. (a) What is Histochemistry and Cytochemistry?
   (b) Add a note on the basic principles of Histochemistry/Cytochemistry.
2. Write on the methods used for enzyme demonstration.
3. Periodic Acid Schiff (PAS) is one of the histochemical techniques used in the demonstration of carbohydrates (mucin or glycogen). Discuss.
4. Write a very good essay on Radioautography.
5. Discuss Fluorescent Microscopy

Glycol.

AKOBUNJU RICHARD

ABIA STATE UNNIVERSITY, UTURU
COLLEGE OF BASIC MEDICAL SCIENCES
DEPARTMENT OF MEDICAL BIOCHEMISTRY
BCM 221:CHEMISTRY AND METABOLISM OF CARBOHYDRATES AND BIOMOLECULES
FIRST SEMESTER EXAMINATION 19/20 SESSION
ATTEMPT ALL QUESTIONS

1(a) Why would defining carbohydrates as 'hydrates of carbon' not be 'totally' right?
1(b) What suitable definition(s) could be suggested for the term 'carbohydrates' ?

2(a) Outline any four (4) features of enzymes.
2(b) Classify enzymes according to the type of reaction they catalyse.
2(C) Show by graphical representation how substrate concentration affects enzyme activity.

3(a) Present and discuss a named biochemical pathway through which glucose molecules could be stored in a biological system.
3(b) What do you understand by lactose intolerance ?

4. Using biochemical structures **only**, show how acyclic monosaccharides are named based on:
(i) Number of carbon atoms.
(ii) Positioning of the leading functional group.

5. Write short notes on the following:
(i) Digestion of carbohydrates in the stomach.
(ii) Sugar acids.
(iii) Competitive inhibition.

AKOBUNJU RICHARD

Department of Medical Lab. Sciences

Faculty of Health Sciences

College of Medicine and Health Sciences

Abia State University, Uturu

Cardiovascular System

MED. LAB 231

Date: February 17, 2021

Instructions: Attempt all Time: 2hrs. Each question carries 20marks

THEORY

1a. Describe Pulmonary circulation with the aid of a diagram

b. List the components of pulmonary circulation

2a. List the cardiovascular adjustments (Adaptations) during exercise

b. How is the heat generated by the muscles during exercise regulated?

3. Define Cardiac Output.

b. State 5 Physiological and 2 Pathological factors that affect cardiac output.

20

4. List the phases of cardiac membrane potential

b. Discuss the ionic components any two (2) briefly

20

AKOBUNJU RICHARD

ABIA STSTE UNIVERSITY, UTURU
COLLEGE OF BASIC MEDICAL SCIENCES
DEPARTMENT OF BIOCHEMISTRY
FIRST SEMESTER EXAMINATION
BCM 211: PHYSICAL AND ANALYTICAL BIOCHEMISTRY
TIME: 2HOURS
ANSWER ALL QUESTIONS

1. (a) Explain the terms: (i) Conjugate acid (ii) Weak acid (iii) pH and pK
   (b) Strictly using the ionization of the acid, HD, derive the Handerson/ Hasselbalch equation.
   (c) Present the form of the equation at half neutralization.

2. (a) Discuss the principles and application of these biochemical techniques:
   (i) Chromatography (ii) Colorimetry (iii) Spectrophotometry
   (b) Biochemical methods/instrumentation are of great relevance to medical laboratory scientist ; Discuss.

3. (a) What is the volume percent of ethanol in wine made by diluting 15ml of ethanol in 85ml of wine?
(b) Calculate the mass % of NaOH in a NaOH solution prepared by dissolving 8.5g of NaOH in 50.10g.

4. (a) What do you understand by the term osmolarity?
   (b) Discuss the terms used in comparing osmolarity

AKOBUNJU RICHARD

DEPARTMENT OF HUMAN PHYSIOLOGY
FACULTY OF BASIC MEDICAL SCIENCES
ABIA STATE UNIVERSITY, UTURU

Haemorrhage
Diarrh

ANSWER ALL THE QUESTIONS:

1a) Define homeostasis, stating the components of a homeostatic control mechanism.

b) Outline the various processes of transferring substances across the cell membrane.

c) Draw and label a chemical synapse, state the various adrenergic and cholinergic receptors with the respective agonist and antagonists.

2) List out 5 causes of Abnormal fluid loss.

3) Classify types of Anaemia with examples.

4) List 4 complications of Abnormal fluid loss.

Thyroid

Haemo

Scanned with CamScanner

2018/1149591Pmg AKOBUNJU RICHARD

DEPARTMENT OF MEDICAL LABORATORY SCIENCE, ABIA STATE UNIVERSITY, UTURU,
FIRST SEMESTER EXAMINATION.
GROSS ANATOMY (ANA 211).

03/02/2021
Time allowed:
1hr, 30mins

Section A (20marks)

1. The anterior boundary of the carpal tunnel is formed by ---------- a) scaphoid b) lunate c) capitates d) flexor retinaculum.
2. --------- Nerve is damaged at the surgical neck of the humerus? A) radial b) musculocutaneous c) axillary d) long thoracic.
3. the thumb is also referred to as the ----------?
4. The glenohumeral joint is ---------- type of joint by their degree of mobility? A) diarthrotic b) amphiathrotic c) synovial d) hinge.
5. The breast is kept in position by ---------- connective tissue? A) fascia b) pectoralis major c) suspensory ligament d) cooper's ligament.
6. The brachioradialis muscle is innervated by ---------- nerve?
7. ---------- is not a content of the femoral sheath.
8. ----------is a unique landmark at the inferior end of the tibia?
9. The cephalic vein passes through ---------- groove to join the axillary vein?
10. The Achilles tendon is inserted into the -------- bone of the foot?
11. The pisiform bone is what type of bone?
12. ---------- Type of glands exists in the breast?
13. What carpal bone is closely related to the anatomic snuff box?
14. ---------- Nerve is easily damaged at the midshaft of the humerus?
15. The big toe is also referred to as ----------
16. ---------- Hernia is most common in females than males?
17. The knee cap is also known as ----------
18. The word "mama" means ----------
19. The mechanism of walking is referred to as ----------
20. The muscles that originate from the scapula and insert at the greater and lesser tubercle of the humerus are known as ----------?

Section B (50marks).

Attempt any 4 question. Question is compulsory.

1. Describe the origin, course, and distribution of the radial nerve.
2. Write short note on the rotator cuff muscles, sitting origin, insertion and nerve supply.
3. Describe the venous drainage of the upper limb, starting with the superficial veins.
4. Discuss in details the applied anatomy of the arches of the foot.
5. Describe the medial compartment of the femoral sheath.
6. Write short note on the cubital fossa and its clinical correlates.

Faculty of Basic Medical Sciences,
Department of Medical Laboratory Science
College of Medicine and Health Sciences,
Abia State University.
First Semester Examination.-CVS
24th May, 2019

Instructions.

Attempt All Questions.

Time :2hrs,25mins

1a. Define arterial blood pressure.

b. With the aid of a diagram, describe Renin-Angiotensin-Aldosterone System (RAAS)

2a. Write a short note on special circulation through the skin.

b. Describe pulmonary circulation with the aid of a diagram.

3. The cardiovascular system responds to input from higher centers of the brain. Discuss briefly.

4a. Describe briefly with the aid of a diagram, the conductive pathway of the heart.

b. State at least five (5) functions of the cardiovascular system.