



University of Fort Hare
Together in Excellence

Programme Unit: Nursing Sciences
East London Campus

SUPPLEMENTARY EXAMINATION: JULY 2023

Basic Anatomy for Speech & Hearing

TIME: 3 HOURS

CODE: APH 111E

MARKS: 100

Student Surname (Capital) -----

Student Names (Capital) -----

Student Number -----

THIS QUESTION PAPER CONSISTS OF 10 PAGES INCLUDING THIS PAGE

INTERNAL EXAMINERS
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Instructions to students:

This question paper consists of four sections (A, B, C, D) and all questions are compulsory.

Answer Section A, Section B and Section C on the question paper and Section D on the answer book. Submit question paper along with answer book.

APH 111E SUPPLEMENTARY EXAMINATION 2023

Section A

(30)

Multiple choice questions

Choose & circle the most correct option:

1. Simple epithelia consist of:
 - a. Single layer of cells
 - b. Two or more layers of cells
 - c. Only 3 layers of cells
 - d. Multiple layers of cells

2. Simple squamous epithelium is present in:
 - a. Air sacs of lungs
 - b. Kidney tubules
 - c. Upper respiratory tract
 - d. Urinary bladder

3. Simple cuboidal epithelium lines:
 - a. Lymphatics
 - b. Upper respiratory tract
 - c. Kidney tubules
 - d. Lower urinary tract

4. Transitional epithelium
 - a. Epithelium of the skin
 - b. Upper respiratory tract
 - c. Ureters and urinary bladder
 - d. Air sacs of lungs

5. Ground substance of the connective tissue is formed by:
 - a. The fibres of the connective tissue
 - b. The cells of the connective tissue
 - c. The interstitial fluid
 - d. The lymphatics

6. Loose reticular connective tissue is present in:
 - a. Lymphoid organs
 - b. Cartilage
 - c. Bone
 - d. Lungs

7. Dense irregular connective tissue is present:
 - a. The dermis of the skin
 - b. Ligaments
 - c. Aponeuroses
 - d. Tendons

8. Which of the following muscles is voluntary muscles:
 - a. Triceps muscles
 - b. Muscles of intestine
 - c. Cardiac muscle
 - d. Muscles of ureter

9. The normal life span of red blood cells:
 - a. 10 – 20 days
 - b. 50 – 60 days
 - c. 30 - 40 days
 - d. 90 – 120 days

10. When red blood cell dies, heme portion of haemoglobin is degraded to:
 - a. Stercobilin
 - b. Urobilinogen
 - c. Ferritin
 - d. Bilirubin

11. Which of the following blood cell doesn't contain nucleus?
- Neutrophils
 - Eosinophils
 - Monocytes
 - Erythrocytes
12. Which of the following blood cells are increased in chronic infections?
- Lymphocytes
 - Eosinophils
 - Basophils
 - Neutrophils
13. Which part of the respiratory tract contains the opening pharyngotympanic (auditory tubes which drain the middle ear cavities)?
- Oropharynx
 - Nasopharynx
 - Trachea
 - Laryngopharynx
14. Palatine tonsils lie in the:
- Oropharynx
 - Nasopharynx
 - Laryngopharynx
 - Nasal sinus
15. Which of the following is a respiratory zone structure?
- Alveolar sac
 - Trachea
 - Bronchi
 - Larynx

16. Type II alveolar cells of the lungs produce detergent like substance called:
- Bilirubin
 - Hemosiderin
 - Surfactant
 - Ferritin
17. The obstruction of hepatopancreatic sphincter impairs digestion by reducing the availability of:
- Bile and gastric juice
 - Bile and pancreatic juice
 - HCL and intestinal juice
 - Bile and intestinal juice
18. The protein molecule is digested by the enzymes secreted by:
- The mouth and stomach
 - The stomach and pancreas
 - The stomach and liver
 - The small intestine and mouth
19. Carbohydrates are acted on in the GIT by:
- Peptidases, trypsin and chymotrypsin
 - Amylase, maltase and sucrose
 - Lipases
 - Peptidases, lipases and galactases
20. Glucose is not normally found in the urine because it:
- Does not pass through the walls of the glomerulus
 - Is kept in the blood by the colloid osmotic pressure
 - Is reabsorbed by the tubule cells
 - Is removed by the body cells before the blood reaches the kidney

21. What is the structural and functional unit of the kidney?
- Glomerulus
 - Nephron
 - Collecting ducts
 - Renal medulla
22. Which of the following blood vessels are the most elastic?
- Distributing arteries
 - Arterioles
 - Venules
 - Conducting arteries
23. Tachycardia results when the heart rate is:
- More than 100/min
 - More than 80/min
 - Less than 100/min
 - Less than 300/min
24. Which of the following layer is heaviest (thick) in veins?
- Endothelium
 - Subendothelium
 - Tunica intima
 - Tunica externa
25. Which of the following blood vessels are called as Capacitance vessels:
- Muscular arteries
 - Capillaries
 - Conducting arteries
 - Veins
26. Which of the following blood vessels carry up to 65% of body's blood supply?
- Muscular arteries
 - Capillaries
 - Conducting arteries
 - Veins

27. Which of the following cartilage is the most inferior cartilage, resting on top of the trachea?
- a. Corniculate
 - b. Cuneiform
 - c. Cricoid
 - d. Arytenoid
28. Which of the following cartilages is unpaired cartilage?
- a. Cuneiform
 - b. Arytenoid
 - c. Corniculate
 - d. Thyroid
29. Which of the following organs are involved in achieving immunocompetence for T lymphocytes?
- a. Tonsils
 - b. Spleen
 - c. Thymus
 - d. Lymph nodes
30. Which of the following organs are involved in extracting aged blood cells and platelets?
- a. Tonsils
 - b. Lymph nodes
 - c. Spleen
 - d. Thymus

Section B (15)

Choose and circle the correct option:

1. Fenestrated capillaries are abundant in skin and muscles. (True) or (False)
2. B lymphocytes give rise to antibodies. (True) or (False)
3. Basophils are increased during chronic bacterial infections in the body. (True) or (False)
4. When red blood cell dies, heme portion of haemoglobin is degraded to ferritin. (True) or (False)
5. In chronic infections, like tuberculosis lymph nodes are swollen & firm in consistency but not painful. (True) or (False)
6. The most homeostatic mechanisms in the body are negative feedback mechanisms. (True) or (False)
7. The oxygenated blood is supplied to the lungs by bronchial arteries. (True) or (False)
8. Pulmonary veins carry deoxygenated blood to the lungs. (True) or (False)
9. Sinusoidal capillaries are found in liver, spleen and bone marrow. (True) or (False)
10. During left ventricular contraction oxygenated blood is poured into aorta. (True) or (False)
11. Coronary arteries are the branches of ascending aorta. (True) or (False)
12. In persons with Blood group AB, both anti-A and anti-B agglutinins are present. (True) or (False)
13. Pancreas secretes enzymes required for digestion of proteins, fats and carbohydrates. (True) or (False)
14. The recommended practice to inject anti-D antibodies to Rh negative mother immediately after delivery to prevent Rh isoimmunization in the mother. (True) or (False)
15. The voice produced in phonation is weak. It becomes strong and rich only when amplified and modified by human resonators. . (True) or (False)

Section C**(5)**

Choose the most correct option from the multiple answers and write in the column B for the structures in the column A

Column A	Column B
Ascending limb of Loop of Henle	
Macula densa cells	
Stomach	
Pancreas	
Liver	

Multiple answers: Reabsorption of solutes, Partial digestion of carbohydrates, Releases enzymes at hepatopancreatic ampulla, Reabsorption of water, Regulation of systemic blood pressure, Releases bile for the digestion of fats, Releases hormones for the digestion of carbohydrates, Regulation of rate of filtrate formation, Chief cells produce pepsinogen, Enhances Lipogenesis.

Section D**(50)**

1. Define the following: (5)
 - 1.1 Frontal plane
 - 1.2 Lateral

- 1.3 Distal
- 1.4 Hyperplasia
- 1.5 Axial parts of the body

2. Write function of the following: (10)
 - 2.1 Nucleus
 - 2.2 Peroxisomes
 - 2.3 Lysosomes
 - 2.4 Intrinsic Laryngeal muscles
 - 2.5 Cilia of the cell
 - 2.6 Stomach
 - 2.7 Large intestine
 - 2.8 Gall bladder
 - 2.9 Juxtaglomerular apparatus
 - 2.10 Urinary bladder

3. List the following: (7)
 - 3.1 Mobile articulators
 - 3.2 Coverings of the heart

4. Explain the clinical significance of the following: (8)
 - 4.1 Bronchopulmonary segments of Lungs
 - 4.2 Coronary (Collateral) circulation
 - 4.3 Venous valves
 - 4.4 Capillary bed

5. Draw and label the diagram of 'Intrinsic cardiac conduction system' and explain it. (10)
6. Explain 'Source-Filter theory'. (5)
7. Explain the blood supply of heart (5)