



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF MEDICAL SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF MEDICAL LABORATORY SCIENCES

AML 4205 : HUMAN ANATOMY II

SPECIAL/ SUPPLIMENTARY EXAMINATIONS

SERIES: SEPTEMBER 2018

TIME: 2 HOURS

DATE: Sep 2018

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of TWO SECTIONS, A AND B. Attempt ALL questions

Circle the correct answer in section A.

Section A

1. Cilia and mucous are found in _____.

A Trachea

B Glottis

C Larynx

D Epiglottis

E Eye

2. Each of the alveolar sac is surrounded by

A capillaries

B veins

C arteries

D primarily lymphatic ducts

E Slime

3. Exchange of oxygen and carbon dioxide between alveolar air and blood is governed by _____.

A diffusion

B blood pressure

C gravity

D active transport

E mass

4. What is reabsorbed through loop of Henle?

A Glucose

B CO₂

C Potassium

D Water

E Soil

5. Which of the following hormones is involved in regulating the water-salt balance of the blood?

A Cortisone

B Aldosterone

C ADH

D ANH

E ABC

6. In a healthy adult man the normal diastolic pressure is

A 80 mm Hg

B 90 mm Hg

C 100 mm Hg

D 120 mm Hg

E 145mm Hg

7. In which one of the following pair the two items mean one and the same thing?

A Leucocytes — lymphocytes

B SA node — pace maker

C Malleus — anvil

D Haemophilia — blood cancer

E Valve — switch

8. The deposition of lipids on the wall lining the lumen of large and medium sized arteries is referred to as

A Osteoarthritis

B Osteoporosis

C Stokes – Adams Syndrome

D Atherosclerosis

E Plastering

9. Which of the following matches correctly?

A Pulmonary artery - Carries deoxygenated blood to the lungs

B Superior vena cava - Receives deoxygenated blood from the lower body and organs

C Inferior vena cava - Receives deoxygenated blood from the head and body

D Hepatic artery - Carries deoxygenated blood to the gut

E Meninges-Kidney

10. Which of the following sequences is truly a systemic circulation pathway?

A Right ventricle → pulmonary aorta → tissues → pulmonary veins → left auricle

B Left auricle → left ventricle → aorta → arteries → tissues → veins → right atrium

C Left auricle → left ventricle → pulmonary aorta → tissues → right auricle

D Right auricle → left ventricle → aorta → tissues → veins → right auricle

E None of the above

11. Which one of the followings refers to blood cancer characterized by uncontrolled proliferation of abnormal/immature white blood cells in the bone marrow?

A Hypertension

B Atherosclerosis

C Leukemia

D Pulmonary embolism

E Bloodilosis

12. Concentration of the urine is controlled by _____

A MSH

B ADH

C Oxytocin

D ACTH

E Exercise

13. Damage to thymus in children may lead to

A Loss of antibody mediated immunity

B Reduction in stem cell production

C Reduction of hemoglobin content of blood

D Loss of cell-mediated immunity

E Extreme hunger

14. ACTH stimulates the adrenal cortex to release a group of hormones called _____.

A Mineralocorticoid

B Glucocorticoid

C Endorphins

D Glucagon

E Insulin

15. Adrenocorticotrophic hormone stimulates the adrenal cortex to produce _____.

- A Epinephrine
- B Aldosterone
- C Cortisol
- D Testosterone
- E Powder

16. An enlarged thyroid is the result of _____ deficiency.

- A Calcium
- B Iodine
- C Iron
- D Phosphorus
- E Zinc

17. Anabolic steroids are _____ versions of testosterone.

- A Effective
- B Synthetic
- C Natural
- D Ineffective
- E Cleaner

18. The hormone known to participate in metabolism of calcium and phosphorus is

- A Mineralocorticoids
- B Calcitonin
- C Glucagon
- D Glucocorticoids
- E Protease

19. Liver the largest gland is associated with several functions. Which one of the following is stated incorrectly?

- A Stores glucose as glycogen

B Manufactures bile, converts the amino groups to urea

C Makes all the cholesterol that human body needs

D Secrete hormone called gastric

E Metabolizes vitamins

20. Which one of the following statement is not correct about intestinal villi?

A A multitudinous finger-like projections having many microvilli

B Increase the internal surface area of the intestinal wall.

C Supplied with capillaries and the lacteal vessels

D Participate only in digestion of fats

E Found mostly in the small intestines

21. What will happen if the secretion of parietal cells of gastric glands is blocked with an inhibitor?

A Enterokinase will not be released from the duodenal mucosa and so trypsinogen is not converted to trypsin

B Gastric juice will be deficient in chymosin

C Gastric juice will be deficient in pepsinogen

D In the absence of HCl secretion, inactive pepsinogen is not converted into the active enzyme pepsin.

E None of the above

22. A young infant may be feeding entirely on mother's milk which is white in colour but the stool which the infant passes out is quite yellowish. What is this yellow colour due to

A Pancreatic juice poured into duodenum

B Intestinal juice

C Bile pigments passed through bile juice

D Undigested milk protein casein

E Blood

23. Bile contribution to digestion is

A Nucleic acid metabolism

B Phagocytosis

C Emulsification of dietary lipids

D Carbohydrate digestion

E Lubrication

24. Name the hormone that stimulates the secretion of gastric juice.

A Renin

B Enterokinase

C Enterogastrone

D Gastrin

E Insulin

25. Which one of the following is not part of the large intestine?

A rectum

B colon

C cecum

D duodenum

E appendix

26. Which one of the followings is a fat-soluble vitamin and its related deficiency disease?

A Retinol – Xerophthalmia

B Ascorbic acid – Scurvy

C Calciferol – Pellagra

D Cobalamin – Beri-beri

E Riboflavin- Blindness

27. Read the statements A and B.

A) The human small intestine is the longest portion in the alimentary canal

B) Absorption of digested food requires a very large surface area

Identify the correct choice on the two statements.

A Statements A and B are both correct.

B Statement A is correct, B is wrong.

C Statement B is correct, A is wrong.

D Both the statements are wrong.

E None of the above

28. Opening to the trachea is covered by a small flap of tissues termed as the _____.

A Glottis

B Trachea

C Epiglottis

D Larynx

E Flapper

29. The exchange of gases between inhaled air and blood is referred as _____.

A Cellular respiration

B External respiration

C Internal respiration

D Circulatory respiration

E Intubation

30. Which of the following statements is true about Trachea in a respiratory system?

A It functions as passages of air to each alveolus

B It functions for sound production

C It Acts as passage of air to bronchi

D It Lowers the surface tension

E Extends beyond the nostrils into the facets

SECTION B

31. a) Draw a detailed structure of the Kidney labeling 10 parts (15 Marks)

b) Describe five functions of the Kidney. (5 Marks)

32. a) Draw a detailed structure of the respiratory tract. (15 Marks)

b) Describe functions of five parts of the lungs. (5 Marks)