



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS
FIRST YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR IN PUBLIC HEALTH

SECOND SEMESTER, 2021/2022
(FEBRUARY - JUNE, 2022)

PHES 124: HUMAN ANATOMY

STREAM: Y1 S2

TIME: 3 HOURS

DAY: THURSDAY, 2:00 – 5:00 P.M.

DATE: 05/05/2022

INSTRUCTIONS

- 1. Do not write anything on this question paper.***
- 2. Answer ALL the questions.***

SECTION A: MULTIPLE CHOICE QUESTIONS

- The most abundant cell type in the skin is
 - Melanocyte
 - Nerve cell
 - Langerhans cell
 - Merkel cell
 - Keratinocyte
- Sebaceous glands in the skin produce
 - Milk
 - Oil
 - Sweat
 - Cerumen
 - Sebum

3. Skin colour is determined by the following pigment
 - A. Melanin
 - B. Carotene
 - C. Hemoglobin
 - D. Bilirubin
 - E. All of the above
4. The hard outer layer of skin is rich in a protein called
 - A. Myelin
 - B. Melanin
 - C. Albumin
 - D. Globulin
 - E. Keratin
5. Which of the following is a correct match?
 - A. Short bone-wrist
 - B. Irregular bone-sternum
 - C. Long bone-tibia
 - D. Flat bone-vertebra
 - E. Hollow bone-femur
6. Which of the following bones articulates with the femur?
 - A. Pubic crest
 - B. Ischial tuberosity
 - C. Patella
 - D. Fibula
 - E. Talus
7. Which bone of the upper limb corresponds with the femur in the lower limb?
 - A. Radius
 - B. Ulna
 - C. Scapula
 - D. Clavicle
 - E. Humerus
8. The shoulder joint is classified as the following type of joint
 - A. Fibrous joint
 - B. Secondary cartilaginous joint
 - C. Primary cartilaginous joint
 - D. Ellipsoid joint
 - E. Synovial joint

9. The cerebral hemispheres are divided into the following number of lobes
- A. 2
 - B. 3
 - C. 5
 - D. 4
 - E. 6
10. The photoreceptor in the eye is located in the
- A. Cornea
 - B. Lens
 - C. Retina
 - D. Choroid
 - E. Aqueous humor
11. The structures of the ear include all the following except
- A. Tympanic membrane
 - B. Cochlea
 - C. Semicircular canals
 - D. Middle ear
 - E. Olfactory epithelium
12. The sympathetic nervous system mediates the following states except
- A. Fight
 - B. Fright
 - C. Flight
 - D. Escape
 - E. Digestion
13. The brainstem includes the following parts except
- A. Medulla oblongata
 - B. Midbrain
 - C. Pons
 - D. Cerebellum
 - E. Temporal lobe
14. Which gland in the body secretes the hormone melatonin?
- A. Skin
 - B. Pancreas
 - C. Pineal
 - D. Ovaries
 - E. Thymus

15. The thyroid gland
- A. Is located anteriorly in the neck
 - B. Secretes hormones involved in renal functioning
 - C. Produces insulin
 - D. Is important for milk production
 - E. Is not related to appetite
16. Insulin is produced by the following cells in the pancreas
- A. Alpha
 - B. Beta
 - C. Delta
 - D. Gamma
 - E. PP
17. Calcium absorption in the gut is promoted by the following hormone
- A. Calcitonin
 - B. Thyroxine
 - C. Vitamin D3
 - D. Insulin
 - E. Glucagon
18. The following are found in the thorax except
- A. Mediastinum
 - B. Lungs
 - C. Heart
 - D. Thymus
 - E. Thyroid
19. The following chambers of the heart are correctly matched to the great vessels
- A. Right atrium-brachiocephalic trunk
 - B. Right ventricle-pulmonary vein
 - C. Left atrium-pulmonary vein
 - D. Left ventricle-vena cava
 - E. Left auricle-aorta
20. The following is not a function of the lymphoreticular system
- A. Immune function
 - B. Transport function
 - C. Production of new blood cells
 - D. Removal of pathogens and worn-out cells from blood

- E. Synthesis of albumin
21. The following is not an organ of the lymphoreticular system
- A. Lymph nodes
 - B. Spleen
 - C. Liver
 - D. Bone marrow
 - E. Thymus
22. The wall of the gut includes the following layers except
- A. Mucosa
 - B. Submucosa
 - C. Muscularis externa
 - D. Visceral peritoneum
 - E. Tunica media
23. The following are accessory glands of the gastrointestinal tract except
- A. Submandibular gland
 - B. Exocrine pancreas
 - C. Endocrine pancreas
 - D. Liver
 - E. Parotid gland
24. The following are related to the peritoneal cavity except
- A. Parietal peritoneum
 - B. Visceral peritoneum
 - C. Supracolic compartment
 - D. Infracolic compartment
 - E. Parietal pleura
25. The path of urine to the bladder is
- A. Renal calyces-renal pelvis-ureter-bladder
 - B. Renal calyces-renal pelvis-urethra-bladder
 - C. Renal pelvis-renal calyces-ureter-bladder
 - D. Renal pelvis-renal calyces-urethra-bladder
 - E. Renal tubules-renal pelvis-ureter-bladder
26. The kidney performs the following except
- A. Excretion of urea
 - B. Reabsorption of sodium
 - C. Reabsorption of water
 - D. Production of erythropoietin

E. Production of aldosterone

27. The following are parts of the internal male genitalia except

- A. Testes
- B. Prostate
- C. Seminal vesicles
- D. Epididymis
- E. Urethra

28. The following are parts of the internal female genitalia except

- A. Ovary
- B. Fallopian tubes
- C. Uterus
- D. Cervix
- E. Vulva

29. The bones of the pelvis include the following except

- A. Ischium
- B. Ilium
- C. Pubis
- D. Femur
- E. Sacrum

30. The following hormones have roles in reproductive functions except

- A. Testosterone
- B. Oestrogen
- C. Progesterone
- D. Luteinizing hormone
- E. Vitamin D

SECTION B: SHORT ANSWER QUESTIONS

1. Identify 5 organelles of the human cell and state their function (10 marks)
2. List 5 functions of the skin in human beings (5 marks)
3. List 5 functions of the kidney in human beings (5 marks)
4. Name 5 lobes in the cerebral hemispheres indicating a function localized to each (10 marks)
5. Identify 5 organ systems of the human body and identify 1 disease of public health importance that affects each system listed (10 marks)