



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

INSTITUTION BASED PROGRAMME (DECEMBER SESSION)

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

(MEDICAL LABORATORY SCIENCES)

HML 103: HUMAN ANATOMY II

DATE: FRIDAY, 4TH MAY 2012

TIME: 8.00 A.M. – 10.00 A.M.

Section A: Answer all questions (5mks each)

1. Briefly describe the structure of the cardiac muscle
2. Write brief notes on;
 - a) gall bladder
 - b) Tendons
3. Briefly describe the blood supply and drainage to the heart wall

Section B: Answer one questions (20mks each)

4. With aid of a labeled diagram, describe the structure of the brain
5. Outline the structure, enervation, blood supply and drainage of the kidney

SECTION C: Answer all questions by circling the correct option (1/2 mark each)

1. The most hypertrophied part of the heart wall is the;
 - a) Right ventricle
 - b) Auricle
 - c) Atrium
 - d) Left ventricle
2. The correct order of layers in the intestinal wall is
 - a) Circular muscles, longitudinal muscles, mucosa, sub mucosa, serosa
 - b) Mucosa, sub mucosa, longitudinal muscles, Circular muscles, serosa
 - c) Mucosa, sub mucosa, Circular muscles, serosa, longitudinal muscles
 - d) Mucosa, sub mucosa, Circular muscles, serosa, longitudinal muscles, serosa
3. Concerning autonomic nervous system;
 - a) All pre-ganglionic SNS neurons synapse at the para-veterbral ganglion
 - b) Pre-ganglionic SNS neurons produce acetyl choline at their nerve endings
 - c) Only PSNS have longer Pre-ganglionic nerve fibers than post ganglionic nerves
 - d) None of the above
4. Taeniae coli are found in the;
 - a) Stomach
 - b) Duodenum

- c) Esophagus
 - d) Colon
5. The correct order of layers in the artery wall is;
- a) Endothelium, adventitia, intima, media
 - b) Endothelium, intima, media, adventitia
 - c) Endothelium, media, intima, adventitia
 - d) Media, intima, adventitia, Endothelium
6. Micro-villi are found in;
- a) Colon
 - b) Vermiform appendix
 - c) Ileum
 - d) Stomach
7. Skeletal muscles
- a) Has intercalated discs
 - b) Are found in visceral tissues
 - c) Are inserted in bones by tendons
 - d) Are inserted in bones by ligaments
8. Respiratory epithelium is found in;
- a) trachea
 - b) bronchioles
 - c) respiratory bronchioles
 - d) none of the above
9. Which is the odd one out?
- a) Intercostals muscles
 - b) abdomini recti
 - c) sternocleidomastoid
 - d) gluteus minimus
10. The blood vessel with the highest percentage of smooth muscle is;
- a) Aorta
 - b) large arteries
 - c) arterioles
 - d) vena cava
11. One of the statements is following is true;
- a) Aorta is more muscular than arterioles
 - b) Aorta has higher content of elastin than large arteries
 - c) Aortic valves are also referred to as mitral valves
 - d) arterioles have less content of smooth muscle fibers than large arteries
12. Which is the odd one out?
- a) Basilar artery
 - b) Coronary artery

- c) Circle of willis
 - d) Internal carotid artery
13. Concerning hypophysis cerebri
- a) It has no neural endocrine function
 - b) It is related to optic chiasma
 - c) It's origin is the hypothalamus only
 - d) none of the above is true
14. Blood supply to the aorta is via
- a) Arteriole-venous anastomosis
 - b) Vasa vasorum
 - c) Coronary arteries
 - d) None of the above
15. Interstitial cells of Leydig
- a) produces testosterone
 - b) nourishes spermatids
 - c) nourishes spermatozoa
 - d) are ovarian cells
16. One of the following is not a part of the meningeal layer
- a) Dura
 - b) Choroid plexus
 - c) Arachnoid
 - d) Pia
17. Oblique muscle layer is found in the ;
- a) vermiform appendix
 - b) stomach
 - c) colon and caecum
 - d) ileum
18. Receptor for pain are;
- a) free nerve endings
 - b) paccinian corpuscle
 - c) rods and cones
 - d) hair cells in ears
19. The most recommended position in the body where CSF sample may be obtain is at the;
- a) junction between 4th and 5th lumbar vertebrae
 - b) foramen magnum
 - c) central canal of the spinal cord
 - d) junction between 3rd and 4th lumbar vertebrae
20. Optic nerve ;
- a) is not covered by meninges
 - b) is not part of CNS

- c) is the 3rd cranial nerve
 - d) control the eyeball movements
21. The three bands of muscles found in the colon are known as;
- a) taeniae coli
 - b) muscularis mucosa
 - c) serosa
 - d) circular muscles
22. Respiratory epithelium is found in
- a) alveoli only
 - b) bronchioles
 - c) respiratory bronchioles
 - d) trachea
23. Which of the following statements concerning the anterior pituitary gland is not true;
- a) contain hormone producing somatic cells
 - b) contain hormone producing nerve cells
 - c) gets blood supply from hypothalamic-hypophyseal portal vessels
 - d) is separated from posterior pituitary by pars intermedia
24. Surfactant is produced by;
- a) Pneumocyte type I
 - b) Pneumocyte type II
 - c) Mast cell
 - d) Macrophages
25. Stomach is associated with;
- a) Pyloric sphincter
 - b) cecum
 - c) Common bile duct
 - d) villi
26. Which of the following structure is not associated with a portal system of blood vessels?
- a) kidney
 - b) pituitary gland
 - c) liver
 - d) skin
27. One of the following is not an accessory muscles of respiration;
- a) sternocleidomastoid
 - b) rectus abdominis
 - c) gluteus medius
 - d) intercostals
28. The 10th cranial nerve is known as;
- a) Trigeminal nerve
 - b) Vagus nerve

- c) Glossopharyngeal nerve
 - d) Facial nerve
29. Cartilage is found in the following except;
- a) Small bronchioles
 - b) Trachea
 - c) Bronchus
 - d) None of the above
30. Uterus
- a) Consists of skeletal muscle fibers
 - b) Is related to cervix superiorly
 - c) Produces the female gamete
 - d) Has a layer known as endometrium in its luminal aspect
