



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2008/2009

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

SML 102: ANATOMY II

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DATE: WEDNESDAY 9TH SEPTEMBER 2009 TIME: 8.00 A.M. – 10.00 A.M.

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INSTRUCTIONS

SECTION A

Answer ALL Questions from this section.

1. Describe the circle of willis. (5 marks)
2. With aid of diagram, describe the structure of Adrenal (supra renal) gland. (5 marks)
3. Compare and contrast the structure of aorta and arterioles. (5 marks)

SECTION B

Answer TWO Questions from this Section

4. Compare and contrast the structure of the small intestine and the stomach. (20 marks)
5. With aid of a diagram, describe the structure of the kidney. (20 marks)

6. Draw the structure of
- a) Paccinian corpuscle. (5 marks)
 - b) Central nervous system and show the following: pons, cerebrum, medulla oblongata, cerebellum, spinal cord, meninges, and hypothalamus. (15 marks)

SECTION C

Answer All Questions. Each Question is worth ½ mark.

Indicate the correct answer with either ✓ or X on the Question paper.

1. Skeletal muscle
 - a) has striations
 - b) has no striations
 - c) has spindle shaped cells
 - d) is uninucleated

2. Skeletal muscle
 - a) is inserted into the bone by ligaments.
 - b) is inserted into bone by tendons
 - c) has intercalated discs
 - d) is found in the visceral organs

3. Smooth muscle has;
 - a) Striations
 - b) Intercalated discs
 - c) Dense bodies
 - d) All the above

4. In the eye, the light receptor is
- a) lens
 - b) cornea
 - c) blindspot
 - d) retina
5. Receptor for pressure is
- a) Klaus receptor
 - b) Meissners corpuscle
 - c) Paccinian corpuscle
 - d) Rufini receptor
6. The following is not associated with cerebral circulation.
- a) basilar artery
 - b) internal carotid artery
 - c) inferior mesenteric artery
 - d) circle of willis
7. Which of the following is NOT true?
- a) Aorta is highly muscular
 - b) Aorta is elastic
 - c) Arterioles has higher content of smooth muscle than larger arteries
 - d) Veins and lymphatics have valves.

8. Pituitary gland (Hypophysis cerebri)
- a) is not associated with the hypothalamus
 - b) is divided into neural and adenohypophysis by parsintermedia.
 - c) originates only from the rathke's pouches.
 - d) all the above statements are true.
9. Heart muscles is supplied with blood by;
- a) Vasa vasorum
 - b) coronary veins
 - c) coronary arteries
 - d) vena cava
10. Sertoli cells in seminiferous tubules,
- a) Nourishes spermatozoa
 - b) Nourishes spermatids
 - c) produces testosterone
 - d) support spermatogonia
11. The correct order of meningeal layers is
- a) Dura, Arachnoid, Pia
 - b) Pia, Dura, Arachnoid
 - c) Arachnoid dura, Pia
 - d) Dura Pia Arachnoid
12. Microvilli are found in ;
- a) colon
 - b) stomach
 - c) ileum
 - d) Rectum

13. Layers of ileum include the following Except ;
- a) Serosa
 - b) circular muscle
 - c) mucosa
 - d) oblique muscle
14. Cerebral spinal fluid is mainly formed in;
- a) Third ventricle
 - b) Lateral ventricle
 - c) Fourth Ventricle
 - d) Pons
15. The following is NOT part of central nervous system ;
- a) Adrenal medulla and para vertebral ganglia
 - b) Optic nerve
 - c) Spinal cord
 - d) Brain
16. Taenia coli are found in
- a) colon
 - b) duodenum
 - c) stomach
 - d) esophagus
17. Respiratory epithelium is found in
- a) alveolus only
 - b) respiratory bronchioles only
 - c) Bronchioles
 - d) alveoli and respiratory bronchioles

18. The following structure is NOT found in the penis of the male
- a) corpus spongiosum
 - b) Corpus cavernosus
 - c) Corpus callosum
 - d) all the above
19. Cartilage in the respiratory system are found in following Except
- a) Trachea
 - b) Extra pulmonary bronchi
 - c) Pulmonary bronchi
 - d) Terminal bronchiole
20. The following statement is true concerning surfactant; Except;
- a) Is produced by pneumocyte type II
 - b) Is produced by pneumocyte type I
 - c) Lowers the surface tension of the alveoli
 - d) Deficiency can cause respiratory distress syndrome.
21. The correct order of arterial wall is;
- a) Endothelium, adventitia intima media
 - b) Endothelium intima, media, adventitia
 - c) Endothelium, media, intima, adventitia
 - d) Adventitia, endothelium, media, intima.
22. The afferent arteriole in the kidney;
- a) have a wider lumen than efferent arteriole
 - b) has a narrow lumen than efferent arteriole
 - c) is formed by coalescing of glomerular capillaries
 - d) None of the above is true.

23. The following is NOT a part of the nephron
- a) Bowmans capsule tubule
 - b) Proxima convoluted tubule
 - c) Distal convoluted tubule
 - d) Glomerulus.
24. Which of the following statements about autonomic nervous system is NOT true?
- a) Preganglionic neurons of sympathetic nervous system (SNS) synapse in paravertebral ganglion.
 - b) Preganglionic neurons of parasympathetic nervous system (PSNS) synapse at the para vertebral ganglion
 - c) Adrenal medulla is not part of autonomic nervous system
 - d) Preganglionic nerves of P.S.N.S are longer than post ganglionic nerve fibres.
25. The most hypertrophied part of heart wall is;
- a) Right ventricle
 - b) Auricle
 - c) Left ventricle
 - d) Atrium
26. Correct order of small intestinal wall layers is
- a) Circular muscles, longitudinal muscles, mucosa, submucosa, serosa
 - b) Mucosa, longitudinal and circular muscle, submucosa, serosa
 - c) Longitudinal, and circular muscles, submucosa , mucosa serosa
 - d) Serosa, longitudinal muscle, circular muscle, submucosa and mucosa

27. The following is the odd one out
- a) Tympanic membrane
 - b) ossicles
 - c) ocular motor nerve
 - d) Auditory nerve
28. The following structures are found in the ovary Except;
- a) Endometrium
 - b) graafian follicle
 - c) Corpus luteum
 - d) Primary follicles
29. Accessory muscles of respiration includes the following Except;
- a) Sternocleidomastoid
 - b) Gluteus maximus
 - c) Intercostal muscles
 - d) Rectus abdominis
30. Which of the following is used for preservation of tissue in the laboratory.
- a) 70% alcohol
 - b) formalin
 - c) disinfectants and soap
 - d) antiseptics

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