



# CENTRAL UNIVERSITY

SCHOOL OF MEDICINE AND HEALTH SCIENCES  
DEPARTMENT OF NURSING

END OF FIRST SEMESTER EXAMINATION, DECEMBER, 2018

NSNG 101: ANATOMY 1

LEVEL 100

DURATION: 1<sup>1</sup>/<sub>2</sub> HOURS

Index no.....

**INSTRUCTIONS:** Answer all questions

**DO NOT TURN OVER THIS PAGE UNTIL YOU HAVE BEEN TOLD TO  
DO SO BY THE INVIGILATOR**

Examiner: Prof. J Samman

Which of the following would you expect to find on cells whose main function is absorption?

- a) Microvilli.
- b) Gap junctions.
- c) Desmosomes.
- d) Secretory vesicles.

8. Desmosomes are ..... junctions.

- a) anchoring
- b) basement
- c) communicating
- d) impermeable

9. Gap junctions are ..... junctions.

- a) anchoring
- b) basement
- c) communicating
- d) impermeable

10. The type of tissue which forms the inner lining of the vagina is called .....

- a) Stratified non-keratinized squamous epithelium.
- b) Stratified keratinized squamous epithelium.
- c) Stratified keratinized columnar epithelium.
- d) Stratified non-keratinized columnar epithelium.

11. The four basic types of tissues found in the human body are .....

- a) bone, cartilage, muscle, and connective tissues.
- b) epithelial, connective, muscle, and nervous tissues.
- c) loose connective, dense connective, bone and nervous tissues.
- d) muscle, cartilage, glandular and connective tissues.

12. Mature neurons do not under-go cell divisions because they do not have .....,.....
- a) centrioles.
  - b) centrosomes.
  - c) Nissl bodies.
  - d) nuclei.
13. Epithelial tissue cells are named according to their.....
- a) height.
  - b) location.
  - c) shape.
  - d) size
14. Finger nails consist of .....
- a) simple keratinized epithelium.
  - b) simple non-keratinized epithelium.
  - c) stratified keratinized epithelium.
  - d) stratified non-keratinized epithelium.
15. Transitional epithelium is common in the.....
- a) kidney.
  - b) ureter.
  - c) lungs.
  - d) liver.
16. The epithelial tissue cells lining the intestines are called ..... cells.
- a) columnar
  - b) cuboidal
  - c) squamous
  - d) transitional
17. In the nasal cavity, the epithelial tissue cells have ..... on their surfaces.
- a) cilia
  - b) hairs
  - c) microvilli
  - d) none of the above
18. Simple cuboidal epithelium is common in .....
- a) the digestive tract.
  - b) the glands.
  - c) the mouth.
  - d) none of the above.

19. Smooth muscle cells are or have.....
- a) intercalated discs.
  - b) multi-nucleated.
  - c) branched.
  - d) non-striated.
20. Stratified columnar epithelium is common in .....
- a) the digestive tract.
  - b) the respiratory tract.
  - c) the salivary gland.
  - d) none of the above.
21. Which of the following statements is untrue?
- a) The conchae produce mucus
  - b) The conchae increase the surface area of mucosa.
  - c) The conchae increase air turbulence in the nasal cavity.
  - d) None of the above.
22. Which of the following two are tonsils?
- a) pharyngeal and lingual
  - b) Palatine and sublingual
  - c) parotid and lingual
  - d) None of the above.
23. The lacrimal duct opens into the.....
- a) laryngopharynx
  - b) nasal cavity
  - c) nasopharynx
  - d) oropharynx
24. The structure that divides the oral cavity from the nasal cavities is called .....
- a) conchae.
  - b) palate.
  - c) septum.
  - d) sinus.
25. The structure that divides the two nasal cavities is called .....
- a) conchae.
  - b) palate.
  - c) septum.
  - d) sinus.
26. The vocal folds (true vocal cords) in the respiratory system occur in the.....
- a) Bronchus.
  - b) Larynx.
  - c) Laryngopharynx.
  - d) Trachea.

27. The ..... prevents food from entering the larynx during swallowing.
- a) epiglottis
  - b) glottis
  - c) tonsil
  - d) thyroid gland.
28. How many lobes does the left lung have?
- a) Two.
  - b) Three.
  - c) Four.
  - d) Five.
29. The oropharynx is inferior in location to the .....
- a) larynx
  - b) laryngopharynx
  - c) nasopharynx
  - d) trachea
30. The Adam's apple forms part of the .....
- a) bronchus.
  - b) larynx.
  - c) pharynx.
  - d) trachea.
31. Each of the lungs is located in a/an ....
- a) abdominal cavity.
  - b) dorsal cavity.
  - c) pericardium.
  - d) pleural cavity.
32. The epiglottis of the larynx is a .....
- a) bone.
  - b) cartilage.
  - c) connective tissue.
  - d) membrane.
33. When you exhale, air flows through respiratory structures in which sequence? :
- a) Alveolus, bronchiole, bronchus, larynx, pharynx, and nasal cavity.
  - b) Alveolus, trachea, bronchus, bronchiole, larynx, pharynx, and nasal cavity.
  - c) Alveolus, bronchus, bronchiole, trachea, larynx, pharynx, and nasal cavity.
  - d) Alveolus, bronchiole, bronchus, trachea, larynx, pharynx, and nasal cavity.

34. Sinuses in the respiratory system .....
- a) enhance speech.
  - b) increase surface area in the nasal cavity.
  - c) keep nasal cavity open.
  - d) warm inhaled air.
35. The accessory structures of the digestive system include the following:
- a) Cecum, salivary glands, kidneys, and pancrease.
  - b) Liver, teeth, pancrease, and salivary glands.
  - c) Pancrease, liver, cecum, and salivary glands.
  - d) Salivary glands, kidneys, liver, and cecum.
36. The..... are the four regions of the stomach.
- a) body, fundus, duodenum, and pylorus
  - b) cardiac, fundus, body, and pylorus
  - c) esophagus, pylorus, fundus, and cardiac
  - d) pylorus, body, duodenum, and cardiac
37. The muscles that occur in the stomach wall are:
- a) skeletal, longitudinal smooth, and circular smooth muscles.
  - b) longitudinal smmoth, skeletal, and circular smooth muscles.
  - c) longitudinal smooth, circular smooth, and oblique smooth muscles.
  - d) oblique smooth, longitudinal smooth and skeletal muscles.
38. Which of the following teeth type is absent in deciduous or milk teeth?
- a) Canine
  - b) Incisors
  - c) Molars
  - d) Premolars
39. The three major subdivisions of the small intestine are:
- a) cecum, duodenum, and ileum.
  - b) cecum, jejunum, and duodenum.
  - c) jejunum, duodenum and colon.
  - d) ileum, jejunum, and duodenum.
40. The pyloric sphincter of the digestive tract is between the .....
- a) esophagus and the stomach.
  - b) small intestine and the large intestine.
  - c) rectum and the anus.
  - d) stomach and the duodenum.

41. All veins above the diaphragm drain into the .....
- a) brachiocephalic trunk
  - b) inferior vena cava
  - c) pulmonary veins
  - d) superior vena cava
42. The left atrium receives blood from the.....
- a) aorta.
  - b) pulmonary artery.
  - c) pulmonary vein.
  - d) vena cavae.
43. The left ventricle pumps blood into the.....
- a) aorta.
  - b) pulmonary artery.
  - c) pulmonary vein.
  - d) vena cavae.
44. Which of the following blood vessels has a semi-lunar valve?
- a) coronary artery.
  - b) pulmonary trunk.
  - c) pulmonary vein.
  - d) vena cava.
45. The heart is located in a cavity called .....
- a) abdominal cavity.
  - b) mediastinum.
  - c) pleural cavity.
  - d) ventral cavity.
46. The right atrio-ventricular valve consists of ..... cusps or leaflets.
- a) two
  - b) three
  - c) four
  - d) five
47. Blood vessels have three main layers. They are.....
- a) tunica mucosa, tunica media, and tunica externa.
  - b) tunica media, tunica intima, and tunica submucosa.
  - c) tunica externa, tunica intima, and tunica capsula.
  - d) tunica intima, tunica media, and tunica externa.

- 48. The three main arteries that branch off from the top of the aortic arch are:**
- a) Brachiocephalic trunk, left common carotid artery, and left subclavian artery.
  - b) Left common carotid artery, coronary artery, and left subclavian artery.
  - c) Left subclavian artery, abdominal aorta, and brachiocephalic trunk.
  - d) Right subclavian artery, brachiocephalic trunk, and right subclavian artery.
- 49. The phrenic arteries are branches of the .....**
- a) abdominal aorta.
  - b) ascending aorta.
  - c) common iliac artery.
  - d) thoracic aorta.
- 50. Which of the following blood vessels carry oxygen rich-blood?**
- a) Cardiac vein
  - b) Inferior vena cava
  - c) Pulmonary vein
  - d) Superior vena cava
- 51. Which of the following vessels carry oxygen poor blood?**
- a) Abdominal aorta
  - b) Coronary artery
  - c) Umbilical artery
  - d) Pulmonary vein
- 52. Foramen ovale is a/an .....**
- a) duct between the pulmonary trunk and the aortic arch
  - b) closed duct between the pulmonary trunk and the aorta
  - c) opening between the right and the left atria
  - d) scar between the right and the left atria
- 53. Arterial blood supply to the brain is by the .....**
- a) external carotid artery, and vertebral artery.
  - b) internal carotid artery, and external carotid artery.
  - c) internal carotid artery, and vertebral artery.
  - d) subclavian artery, and external carotid artery.
- 54. The umbilical cord contains blood vessels. The vessels are:**
- a) 1 artery and 1 vein.
  - b) 2 arteries and 2 veins.
  - c) 1 vein and 2 arteries
  - d) 2 veins and 1 artery.



**55. In fetal circulation, ..... allows blood to flow from pulmonary artery to aorta.**

- a) ductus arteriosus
- b) foramen ovale
- c) fossa ovalis
- d) ligamentum arteriosum

**56. Fossa ovalis is a/an .....**

- a) duct between the pulmonary artery and the aortic arch.
- b) closed duct between the pulmonary artery and the aorta.
- c) opening between the right and the left atria.
- d) scar between the right and the left atria.

**57. Which layer of the heart wall is the thickest?**

- a) Endocardium
- b) Endothelium
- c) Epicardium
- d) Myocardium

**58. Which of the following glial cells forms a barrier between a neuron and a blood capillary?**

- a) Astrocytes
- b) Ependymal cells
- c) Microglia
- d) Satellite cells

**59. Which of the following glial cells is phagocytic?**

- a) Astrocytes
- b) Ependymal cells
- c) Microglia
- d) Satellite cells

**60. Which of the following organs is NOT in the pelvic cavity?**

- a) kidneys
- b) ovaries
- c) sigmoid colon
- d) urinary bladder

**SECTION B: Answer the following questions. (2 marks each)**

**1. What is greater omentum?**

Answer: .....  
.....  
.....  
.....  
.....

**2. Where in the body does fibro-cartilage occur?**

Answer: .....  
.....

**3. Apart from hairs, name two structures or substances in the nasal cavity that help to prevent particles (dust and pathogens) from entering the lungs.**

Answer: .....  
.....

**4. What is the advantage of the fact that the C-shaped cartilaginous rings of the trachea are incomplete posteriorly?**

Answer: .....  
.....  
.....  
.....  
.....

**5. Which part of the respiratory system is the air moistened and warmed?**

Answer: .....  
.....

**6. Name the arteries that supply the lungs with oxygenated blood.**

Answer: .....  
.....

**7. Which of the two main bronchi is the most likely site for an inhaled object to become lodged? Explain why.**

Answer: .....  
.....  
.....  
.....  
.....

8. Name the four structures that make up the respiratory zone.

Answer: .....  
.....  
.....

9. What is the exact location of caecum in the digestive tract?

Answer: .....  
.....

10. Which blood vessel can be palpated at the posterior part of the knee?

Answer: .....  
.....

11. Explain what tongue-tie is.

Answer: .....  
.....  
.....  
.....  
.....  
.....

12. What is cleft palate?

Answer: .....  
.....  
.....  
.....  
.....

13. What are chordae tendineae in the circulatory system?

Answer: .....  
.....  
.....  
.....  
.....

14. Which two arteries form the circle of Willis (circulus arteriosus) in the brain?

Answer: .....  
.....

15. What are varicose veins?

Answer: .....  
.....  
.....  
.....  
.....  
.....

16. Name three structures that can be found in the mediastinum.

Answer: .....  
.....

17. Which vein in the arm is often chosen as the site for drawing blood for the purpose of blood testing?

Answer: .....  
.....

18. What causes cerebrovascular accident?

Answer: .....  
.....  
.....  
.....

19. Which of the blood vessels/vessel in the umbilical cord carry/carries oxygen-poor blood?

Answer: .....  
.....

20. What four structures constitute respiratory membrane?

Answer: .....  
.....  
.....

Total of 100 marks

Examiner: J. Samman

**C U - SCHOOL OF MEDICINE AND HEALTH SCIENCES**

**DEPARTMENT OF NURSING**

**2018/2019 END OF FIRST SEMESTER EXAMINATION**

**NSNG 101 (ANATOMY 1)**

**TIME: 1 HR 30 MINS**

**INDEX NUMBER: .....**

**DATE .....**

**ANSWER ALL QUESTIONS ON THE QUESTION PAPER.**

**SECTION A: Circle the most appropriate answer from the options (a, b, c and d) given (1 mark each).**

**1. In the anatomical position, the ribs are..... to the lungs.**

- a) deep
- b) inferior
- c) superior
- d) superficial

**2. Which of the planes or sections divides a structure, an organ or the body into anterior and posterior parts?**

- a) frontal
- b) median
- c) sagittal
- d) transverse

**3. Which of the planes or sections divides a structure, an organ or the body into left and right parts?**

- a) frontal
- b) median
- c) sagittal
- d) transverse

**4. Lysosomes are organelles for the .....**

- a) breakdown of proteins.
- b) neutralization of toxic compounds.
- c) removal of damaged organelles or of pathogens.
- d) synthesis of proteins.

**Examiner: J. Samman**

5. Ribosomes are organelles for the .....
- breakdown of proteins.
  - neutralization of toxic compounds.
  - removal of damaged organelles or of pathogens.
  - synthesis of proteins.
6. A cell with abundant peroxisomes would most likely be involved in.....
- ATP manufacture.
  - detoxification activities.
  - movement
  - secretion.
7. Which of the following would you expect to find on cells whose main function is absorption?
- Microvilli.
  - Gap junctions.
  - Cilia.
  - Secretory vesicles.
8. Desmosomes are ..... junctions.
- anchoring
  - basement
  - communicating
  - impermeable
9. Gap junctions are ..... junctions.
- anchoring
  - basement
  - communicating
  - impermeable
10. The type of tissue which forms the inner lining of the vagina is called .....
- Stratified non-keratinized squamous epithelium.
  - Stratified keratinized squamous epithelium.
  - Stratified keratinized columnar epithelium.
  - Stratified non-keratinized columnar epithelium.
11. The four basic types of tissues found in the human body are .....
- bone, cartilage, muscle, and connective tissues.
  - epithelial, connective, muscle, and nervous tissues.
  - loose connective, dense connective, bone and nervous tissues.
  - muscle, cartilage, glandular and connective tissues.