IMPORTANT INSTRUCTIONS: ANSWER ONLY 50 QUESTIONS. Do not answer more than 50 questions. If you answer more than 50 questions, then you will be graded on only the first 50 of these, regardless of whether the extra questions are answered correctly. Choose any 50 questions on the basis of your knowledge of the material. A good strategy is to first attempt to answer all 60 questions, but spend no more than 1 minute on any one. Then choose the 50 with which you are most confident, and then, and only then, transcribe your answers to the answer sheet. Be careful to record your answers on the appropriate number of the answer sheet. Completely blacken the letter of your choice. Completely strike out the number and all letters of the questions you choose not to answer. Turn in only your answer sheet. You may keep the questions.

1) Which of the following is located in the posterior mediastinum?
   A) superior vena cava  
   B) trachea  
   C) esophagus  
   D) thymus  
   E) thyroid  

2) Identify the correct statement concerning the innervation of the anterior two thirds of the tongue.
   A) general sensory modalities are conveyed by the hypoglossal nerve  
   B) gustatory special sense is conveyed by the facial nerve  
   C) motor innervation is by the trigeminal nerve  
   D) motor innervation is by the facial nerve  
   E) all sensory and motor functions are served by the glossopharyngeal nerve  

3) Which of the following is NOT associated with the visceral surface of the liver?
   A) right kidney  
   B) spleen  
   C) transverse colon  
   D) pylorus  
   E) gall bladder  

4) Into which of the following does the jejunum continue most directly?
   A) vermiform appendix  
   B) cecum  
   C) ileum  
   D) ascending colon  
   E) rectum  

5) Which of the following is an intraperitoneal organ?
   A) duodenum  
   B) cecum  
   C) ascending colon  
   D) esophagus  
   E) pancreas  

6) Which of the following is NOT characteristic of both lungs?
   A) cardiac impression  
   B) cupola  
   C) hilum  
   D) aortic impression  
   E) oblique fissure
7) Which of the following open(s) into the nasal cavity via the middle meatus?
   A) nasal antrum
   B) mastoid air cells
   C) sphenethmoid recess
   D) frontal sinus
   E) cavernous sinus

8) Into which of the following does the ophthalmic vein directly drain?
   A) sigmoid sinus
   B) sphenoid sinus
   C) cavernous sinus
   D) superior sagittal sinus
   E) straight sinus

9) The sulcus terminalis is a feature of which of the following?
   A) the cerebrum
   B) the right lung
   C) the tongue
   D) the visceral surface of the liver
   E) the right atrium of the heart

10) Identify the INCORRECT statement regarding the cephalic vein.
    A) it drains the medial antebrachium and brachium
    B) it is probably the most commonly used vessel for intravenous injections
    C) it drains into the axillary vein
    D) it anastomoses with the basilic vein via the median cubital vein
    E) it includes passive valves

11) In fetal circulation, blood is conducted from the pulmonary trunk to the aortic arch by which of the following?
    A) the ductus arteriosus
    B) the epiploic foramen
    C) the ductus venosus
    D) the coronary sinus
    E) the foramen ovale

12) Identify the INCORRECT association.
    A) jejunum – lacteals
    B) stomach – pyloris
    C) ileum – Peyer’s patches
    D) transverse colon – chordae tendinae
    E) sigmoid colon – taenia coli

13) Which of the following types of blood cells perform intracellular digestion of foreign material?
    A) erythrocytes
    B) neutrophils
    C) basophils
    D) thrombocytes
    E) macrophages

14) What is located within the tonsilar fossa?
    A) the opening of the pharyngotympanic tube
    B) the pharyngeal tonsils
    C) the palatine tonsils
    D) the lingual tonsils
    E) the adenoids
15) Identify the **INCORRECT** relationship of organs to surface region.
   A) hepatic colic flexure – right hypochondriac region
   B) gall bladder – left hypochondriac region
   C) jejunum – upper left abdominal quadrant
   D) gaster – upper left epigastriac region
   E) cecum – right inguinal region

16) Into which of the following does the superior mesenteric vein directly drain?
   A) sinus venosus
   B) ductus venosus
   C) hepatic vein
   D) hepatic portal vein
   E) inferior vena cava

17) Which of the following organs is/are located in the abdominal cavity?
   A) urinary bladder
   B) vagina
   C) prostate gland
   D) kidneys
   E) rectum

18) Which of the following passes through the deltopectoral triangle?
   A) azygos vein
   B) basilic vein
   C) cephalic vein
   D) external jugular vein
   E) brachiocephalic vein

19) Which of the following is/are the first and most superior branch(es) of the abdominal aorta?
   A) superior mesenteric artery
   B) coeliac trunk
   C) renal arteries
   D) esophageal arteries
   E) pulmonary arteries

20) Which of the following ultimately drain(s) into the right lymphatic duct?
   A) right axillary lymph nodes
   B) thoracic duct
   C) right inguinal lymph nodes
   D) pararectal lymph nodes
   E) mesenteric lymph nodes

21) Into which of the following do the internal carotid arteries directly flow?
   A) vertebral arteries
   B) middle cerebral arteries
   C) posterior cerebral arteries
   D) cerebellar arteries
   E) posterior communicating arteries

22) Which of the following is/are **NOT** feature(s) of the right atrium?
   A) auricle
   B) opening of the coronary sinus
   C) the sinoatrial node
   D) the fossa ovalis
   E) bicuspid valve
23) Which of the following is/are **NOT** a cartilage(s) of the larynx?
   A) thyroid
   B) cricoid
   C) epiglottis
   D) alar
   E) arytenoid

24) Which of the following is a tributary of (drains directly into) the inferior vena cava?
   A) splenic vein
   B) inferior mesenteric vein
   C) left gonadal vein
   D) internal iliac vein
   E) right renal vein

25) What part of the pancreas is most directly in contact with the duodenum?
   A) splenic flexure
   B) fundus
   C) tail
   D) body
   E) head

26) The recurrent laryngeal nerve is a branch of which of the following?
   A) phrenic nerve
   B) vagus nerve
   C) hypoglossal nerve
   D) brachial plexus
   E) sympathetic chain ganglia

27) On what part of the stomach does the lesser omentum insert?
   A) fundus
   B) cardia
   C) pyloris
   D) lesser curvature
   E) greater curvature

28) What level of spinal injury is critical in respiratory failure?
   A) C₄
   B) C₆
   C) T₁
   D) T₆
   E) T₁₂

29) Dead erythrocytes are removed from circulation by which of the following?
   A) pancreas
   B) liver
   C) choroid plexus
   D) spleen
   E) thymus

30) The greater omentum unites what two organs?
   A) the stomach and transverse colon
   B) the liver and stomach
   C) the transverse colon and pancreas
   D) the jejunum and ileum
   E) the ascending and descending colons
31) Identify the correct location where pulse is taken from the vessel listed.
   A) the superior temporal artery in the temporal fossa
   B) the posterior tibial artery posterior to the lateral malleolus
   C) the radial artery on the anterior distal radius
   D) the common carotid artery in the submandibular triangle
   E) the ulnar artery in the cubital tunnel

32) Which of the following is/are NOT a lymph organ(s)?
   A) pancreas
   B) spleen
   C) vermiform appendix
   D) Peyer’s patches
   E) thymus

33) The vertebral arteries are branches of what vessel(s)?
   A) external carotid arteries
   B) subclavian arteries
   C) brachiocephalic veins
   D) the superior vena cava
   E) the coeliac trunk

34) For which of the following veins is there a corresponding artery of the same name?
   A) azygos vein
   B) facial vein
   C) short saphenous vein
   D) cephalic vein
   E) hepatic portal vein

35) Which of the following organs are directly connected to one another?
   A) nasopharynx – laryngeopharynx
   B) duodenum – ileum
   C) trachea – lungs
   D) descending colon – rectum
   E) cecum – vermiform appendix

36) The profunda femoris artery serves which of the following?
   A) the gluteal region
   B) the anterior femoral compartment
   C) the posterior femoral compartment
   D) the posterior tibial compartment
   E) the popliteal fossa

37) Identify the correct association.
   A) left atrium – sinus venosus
   B) right atrium – papillary muscle
   C) left ventricle – pulmonary semilunar valve
   D) left ventricle – tricuspid valve
   E) interventricular septum – moderator band

38) Which of the following drains the subcutaneous medial lower extremity?
   A) the obturator vein
   B) the basilic vein
   C) the inferior gluteal vein
   D) the great saphenous vein
   E) the short saphenous vein
39) Which of the following is/are NOT a branch(es) of the internal iliac artery?
   A) superior and inferior gluteal arteries
   B) middle rectal artery
   C) superior and inferior vesical arteries
   D) obturator artery
   E) testicular artery

40) What vessel runs immediately medial and deep to the brachioradialis muscle?
   A) the brachial artery
   B) the ulnar artery
   C) the radial artery
   D) the circumflex humeral artery
   E) the profunda brachii artery

41) Which of the following is a branch of the internal carotid artery?
   A) the ophthalmic artery
   B) the lingual artery
   C) the facial artery
   D) the maxillary artery
   E) the vertebral artery

42) Which of the following do NOT lie directly alongside one another?
   A) marginal artery – small cardiac vein
   B) esophagus – trachea
   C) common bile duct – hepatic vein
   D) femoral artery – femoral vein
   E) pulmonary trunk – ascending aorta

43) Identify the INCORRECTLY paired association
   A) gastric pits – stomach
   B) cords of Billroth – spleen
   C) fungiform papillae – posterior 1/3 of tongue
   D) glottis – larynx
   E) superior labial frenulum – oral vestibule

44) The posterior interventricular artery is a branch of what vessel?
   A) right coronary artery
   B) left coronary artery
   C) circumflex artery
   D) coronary sinus
   E) ascending aorta

45) Where is the pulmonary semilunar valve most appropriately heard?
   A) left second intercostal space parasternal
   B) right second intercostal space parasternal
   C) right fifth intercostal space parasternal
   D) left fifth intercostal space parasternal
   E) left fifth intercostal space midclavicular

46) Identify the correct statement regarding the trachea.
   A) it is located in the posterior mediastinum
   B) it is anterior to the esophagus
   C) it lies to the right of the descending aorta
   D) it begins from the pharynx at the glottis
   E) it enters the lungs at the hilum
47) Identify the **INCORRECT** statement.
   A) the subclavian artery becomes the axillary artery at the omohyoid muscle
   B) the external iliac artery becomes the femoral artery at the inguinal ligament
   C) the femoral artery becomes the popliteal artery at the adductor hiatus
   D) the axillary artery becomes the brachial artery at the teres major muscle
   E) the sigmoid sinus becomes the internal jugular vein at the jugular foramen

48) The quadrate lobe is part of which organ?
   A) right lung
   B) liver
   C) cerebrum
   D) stomach
   E) larynx

49) Where is the opening of the duct of the parotid gland?
   A) sublingual region (floor) of the oral cavity
   B) nasal antrum
   C) buccal region of the oral vestibule
   D) oropharynx
   E) lacrimal fossa

50) Which of the following vessels is paired right and left?
   A) brachiocephalic artery
   B) superior mesenteric artery
   C) coeliac trunk
   D) pulmonary trunk
   E) thyrocervical trunk

51) Which of the following is a branch of the maxillary artery?
   A) facial artery
   B) lingual artery
   C) sphenopalatine artery
   D) ophthalmic artery
   E) superficial temporal artery

52) Identify the **INCORRECT** statement regarding cerebrospinal fluid.
   A) it is a blood filtrate
   B) it fills the ventricles of the brain
   C) it is produced in the subarachnoid space surrounding the brain and spinal cord
   D) it is returned to venous circulation via dural sinuses
   E) it is produced by the choroid plexus

53) Identify the correct location of the nasal vestibule.
   A) distal to the nasal conchae
   B) between the superior and inferior conchae
   C) proximal to the nostril
   D) superior to the nasopharynx
   E) inferior to the antrum

54) Which of the following pairs of structures/cavities are directly united by the pharyngotympanic tubes?
   A) the nasopharynx and inner ear
   B) the nasopharynx and middle ear
   C) the nasopharynx and external ear
   D) the oropharynx and middle ear
   E) the oropharynx and mastoid air cells
55) Identify the correct statement.
   A) the innominate veins are formed by the union of the external jugular and subclavian veins
   B) the common iliac vein is formed by the union of the external iliac and internal iliac veins
   C) the femoral vein is formed by the union of the posterior tibial and anterior tibial veins
   D) the superior vena cava is formed by the union of the right brachiocephalic and azygos veins
   E) the axillary veins are formed by the union of the brachial and basilic veins

56) Identify the correct statement regarding teeth.
   A) the mesial surface of the second premolar contacts the distal surface of the first molar
   B) occlusal and apical are opposite directions/orientations
   C) buccal and facial surfaces lie on opposite sides of each molar
   D) enamel is deposited from within the pulp cavity throughout the life of the tooth
   E) the periodontal ligament anchors the root in the alveolus

57) Which of the following organs is served by the inferior mesenteric artery and vein?
   A) stomach
   B) jejunum
   C) ileum
   D) ascending colon
   E) descending colon

58) What feature is located between the vocal and vestibular folds of the larynx?
   A) the glottis
   B) the vestibule
   C) the epiglottis
   D) the laryngeopharynx
   E) the vallecula

59) The hepatic artery is located within which of the following?
   A) the greater omentum
   B) the pylorus
   C) left margin of the epiploic foramen
   D) the falciform ligament
   E) the transverse mesocolon

60) What structure uniquely serves each bronchopulmonary segment?
   A) primary bronchus
   B) secondary bronchus
   C) tertiary bronchus
   D) bronchiole
   E) alveolus