

BOWEN UNIVERSITY, IWO
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF ANATOMY
SECOND IN-COURSE EXAMINATION 2020/2021 SESSION

Paper I: Multiple Choice Question

Time allowed: 1Hour 30 Minutes

Instruction: Attempt ALL Questions

Histologically, respiratory system is divided into

- A. Conducting and respiratory portions
- B. Upper and lower tracts
- C. Conducting and upper parts
- D. Respiratory and lower parts

ANSWER: D

Conducting segment of respiratory system contains the following EXCEPT

- A. Alveoli
- B. Trachea
- C. Bronchus
- D. Nasopharynx

ANSWER: A

Respiratory epithelium contains

- A. Pseudocuboidal cells
- B. Transitional cells
- C. Goblet cells
- D. Chief cells

ANSWER: C

The typical respiratory epithelium is located in the following EXCEPT

- A. Inferior conchae
- B. Middle conchae
- C. Trachea
- D. Upper conchae

ANSWER: D

Olfactory epithelium is found in

- A. Inferior conchae
- B. Middle conchae
- C. Trachea

D. Upper conchae

ANSWER: D

The trachea has

A. 4 major layers

B. 5 major layers

C. 3 major layers

D. 6 major layers

ANSWER: A

Terminal bronchiole has

A. Alveoli

B. Alveolar sac

C. Alveolar ducts

D. Clara cells

ANSWER: D

The second largest human organ is

A. Liver

B. Small intestine

C. Large intestine

D. Skin

ANSWER: A

This is NOT true of functions of the skin include

A. Thermoregulation

B. Metabolic

C. Sexual signaling

D. None of the above

ANSWER: D

Epidermis contains the following EXCEPT

A. Merkel cells

B. Langerhans cells

C. Melanocytes

D. None of the above

ANSWER: D

Human epidermal derivatives include

A. Nail

B. Hairs

C. All of the above

D. None of the above

ANSWER: C

Hair regresses at

A. Anagen

B. Telogen

C. Catagen

D. All of the above

ANSWER: C

This is not part of the close vascular system.

A. Artery

B. Lymphatics

C. Venule

D. Capillaries

ANSWER: B

Myocardium consists of the following cells EXCEPT

A. Contractile cardiocytes

B. Valvular cardiocytes

C. Nodal cardiocytes

D. Sinoatrial cardiocytes

ANSWER: B

This is not true of muscular arteries

A. Tunica intima is thick

B. Tunica media is thick

C. Tunica adventitia is thick

D. None of the above

ANSWER: A

Accessory organs of digestive system include the following EXCEPT

A. Pancreas

B. Liver

C. Duodenum

D. Gall bladder

ANSWER: C

from innermost to outermost layer, the digestive tube is arranged as

A. mucosa, submucosa, muscularis externa, and serosa

B. mucosa, submucosa, serosa, and muscularis externa

C. mucosa, submucosa, serosa, and muscularis externa

D. mucosa, muscularis externa, serosa , and submucosa

ANSWER: A

small intestine includes the following EXCERPT

- A. duodenum
- B. caecum
- C. sigmoid colon
- D. anal canal

ANSWER: D

This is true of arteries

- A. Thin layer of muscle
- B. wide lumen
- C. Have no valves
- D. Thin outer wall

ANSWER: C

This is true of capillaries

- A. Thick tunica media
- B. Wide lumen
- C. Have no valves
- D. None of the above

ANSWER: B

The typical mucosa of digestive tube is

- A. Simple columnar epithelium
- B. Simple squamous epithelium
- C. Simple cuboidal epithelium
- D. Simple transitional epithelium

ANSWER: A

This is true of muscle layer of the heart

- A. endocardium
- B. pericardium
- C. epicardium
- D. none of the above

ANSWER: D

Epithelium of the parietal pleura is

- A. stratified squamous
- B. simple cuboidal
- C. simple squamous
- D. tall columnar

ANSWER: C

This is true of endothelium

- A. also known as mesothelium
- B. forms the endocardium
- C. it is of simple squamous epithelium
- D. all of the above

ANSWER: C

The tunica intima is thick in

- A. capillaries
- B. arteries
- C. veins
- D. all of the above

ANSWER: B

Tunica adventitia of blood vessels is;

- A. the connective tissue
- B. epithelium
- C. nervous tissue
- D. muscle tissue

ANSWER: A

The layers of arteries contain

- A. 4 tunics
- B. 3 tunics
- C. 5 tunics
- D. none of the above

ANSWER: B

Continuous capillaries are located in

- A. pancreas
- B. liver
- C. glomerulus
- D. nervous tissue

ANSWER: D.

This cell layer is only present in thick skin

- A. stratum granulosum
- B. stratum lucidum
- C. stratum spinosum
- D. stratum germinativum

ANSWER: B

Brown skin colour is determined by

- A. haemoglobin
- B. carotene
- C. all of the above
- D. None of the above

ANSWER: D

Dermal ridges form the following EXCEPT

- A. fingerprints
- B. palm prints
- C. footprints
- D. none of the above

ANSWER: D

Papillary layer of the skin contains

- A. sensory nerves
- B. fingerprints
- C. lymphatics
- D. capillaries

ANSWER: B

The following is derived from keratin

- A. hair
- B. sudoriferous glands
- C. sebaceous glands
- D. all of the above

ANSWER: A

Hair is found in

- A. nipples
- B. labia minora
- C. all of the above
- D. none of the above

ANSWER: C

Sebaceous glands are

- A. holocrine glands
- B. apocrine glands
- C. merocrine glands
- D. autocrine glands

ANSWER: A

The order of mechanisms of respiration is

- A. perfusion, ventilation and diffusion

- B. ventilation, diffusion and perfusion
- C. perfusion, diffusion and ventilation
- D. diffusion, ventilation and perfusion

ANSWER: B

Respiratory portion of respiratory system includes the following EXCEPT

- A. terminal bronchiole
- B. respiratory bronchiole
- C. alveolus
- D. alveolar sac

ANSWER: A

The components of digestive system includes

- A. oral region
- B. alimentary canal
- C. accessory glands
- D. all of the above

ANSWER: D

The epithelium of the ureter is

- A. transitional
- B. columnar
- C. stratified squamous
- D. cuboidal

ANSWER: A

Sebaceous glands are found in

- A. face
- B. back
- C. chest
- D. all of the above

ANSWER: D

The internal urethral sphincter is

- A. formed by smooth muscle
- B. formed by skeletal muscle
- C. it is inferior sphincter
- D. under somatic control

ANSWER: A

This is not true of fingerprints

- A. epidermal origin
- B. dermal origin
- C. means of identification

D. none of the above

ANSWER: D

Sudoriferous sweat glands are found in

A. face

B. Back

C. Chest

D. Axilla

ANSWER: D

Vasa vasorum is more numerous in

A. capillaries

B. arteries

C. Veins

D. None of the above

ANSWER: C

Respiratory epithelium is

A. pseudostratified ciliated squamous

B. pseudostratified ciliated columnar

C. pseudostratified ciliated cuboidal

D. pseudostratified ciliated transitional

ANSWER: B

Trachealis muscle is

A. skeletal muscle

B. Smooth muscle

C. Striated muscle

D. None of the above

ANSWER: B

The cartilage of trachea is

A. hyaline

B. fibrocartilage

C. elastic

D. fibroelastic

ANSWER: B

Extrapulmonary bronchi are

A. main bronchi

B secondary bronchi

C. tertiary bronchi

D. lobar bronchi

ANSWER: A

Goblet cells of respiratory tracts are located in

- A. epithelial lining
- B. submucosa
- C. lamina propria
- D. serosa

ANSWER: A

This is true of terminal bronchiole

- A. part of respiratory portion
- B. part of upper conducting portion
- C. part of lower conducting portion
- D. part of gaseous exchange

ANSWER: C

Clara cells are

- A. club cells
- B. goblet cells
- C. alveolar cells
- D. seromucous cells

ANSWER: A

This is true of endothelium

- A. innermost layer of blood vessels
- B. of simple squamous epithelium
- C. all of the above
- D. None of the above

ANSWER: C

Respiratory Bronchiole has the following EXCEPT

- A. clara cells
- B. alveoli
- C. simple columnar epithelium
- D. simple cuboidal epithelium

ANSWER: C

Alveolar cells include

- A. type I pneumocytes
- B. type II alveolar cells
- C. type I alveolar cells
- D. all of the above

ANSWER: A

The largest organ in the human body is

- A. the skin

- B. the liver
- C. the large intestine
- D. the coiled small intestine

ANSWER: A

The blood-gas barrier is located in

- A. within the alveolar ducts
- B. within the respiratory bronchioles
- C. within the wall of alveoli
- D. within the interalveolar septum

ANSWER: C

One of the components of blood-gas barrier is

- A. type II pneumocytes
- B. type II alveolar cells
- C. Alveolar sac
- D. none of the above

ANSWER: D

Pulmonary surfactant is produced by

- A. type II pneumocytes
- B. Clara cells
- C. club cells
- D. All of the above

ANSWER: D

Part of the pharynx involved in respiration is called

- A. nasopharynx
- B. laryngopharynx
- C. all of the above
- D. Oropharynx

ANSWER: C

The hypodermis lies

- A. below the epidermis
- B. between the epidermis and dermis
- C. above the dermis
- D. below the dermis

ANSWER: D

The dermis of the skin contains

- A. stratum corneum
- B stratum lucidum
- C. stratum germinativum

D. blood vessels

ANSWER: D

Epidermis contains the following EXCEPT

A. stratum corneum

B. stratum lucidum

C. stratum germinativum

D. blood vessels

ANSWER: D

Thick skin is located in

A. chest

B. thighs

C. palms

D. groin

ANSWER: C

This is not true of the external features of the stomach

A. fundus

B. body

C. pylorus

D. rugae

ANSWER: D

The muscularis of the small intestine includes

A. inner transverse

B. outer longitudinal

C. middle oblique

D. All of the above

ANSWER: B

Hepatocytes

A. manufacture bile

B. store bile

C. Break down bile

D. all of the above

ANSWER: A

The biliary apparatus consists of

A. common hepatic duct

B. cystic duct

C. all of the above

D. none of the above

ANSWER: D

The apex of renal pyramid is called

- A. Renal base
- B. Renal papilla
- C. Renal column
- D. renal arch

ANSWER: B

The penile urethra is also known as

- A. spongy urethra
- B. membranous urethra
- C. prostatic urethra
- D. none of the above

ANSWER: A

The loop of Helen is sited in

- A. renal cortex
- B. renal corpuscle
- C. renal medulla
- D. corticomedullary junction

ANSWER: C

The most medial structure in the femoral triangle is:

- A. Femoral nerve
- B. Femoral artery
- C. Femoral vein
- D. Femoral canal

ANSWER: D

The tennis players are more prone to the fracture of:

- A. Tendo calcaneus
- B. Superior peroneal retinaculum
- C. Plantaris tendon
- D. Plantar aponeurosis

ANSWER: A

Popliteal lymph nodes drain into:

- A. Superficial inguinal lymph nodes
- b. Deep inguinal lymph nodes
- c. Femoral lymph nodes
- d. Saphenous lymph nodes

ANSWER: B

4. The subsartorial (adductor canal) is located in:

- A. Upper third of thigh
- B. Middle third of thigh
- C. Lower third of thigh
- D. Leg

ANSWER: B

5. Which of these muscles is a lateral rotator of the hip joint?

- a. Gluteus maximus
- b. Gluteus medius
- c. Gluteus minimus
- d. Tensor fascia lata

ANSWER: A

6. Which of the quadriceps femoris muscles performs extension as well as flexion?

- A. Vastus lateralis
- B. Vastus medialis
- C. Vastus intermedius
- D. Rectus femoris

ANSWER: D

7. Which of the following muscles crosses two joints?

- A. Vastus lateralis
- B. Vastus medialis
- C. Vastus intermedius
- D. Rectus femoris

ANSWER: D

8. Which of these muscles form a boundary of adductor hiatus?

- A. Vastus lateralis
- B. Vastus medialis
- C. Vastus intermedius
- D. Rectus femoris

ANSWER: B

9. It is the first gear muscle?

- A. Gastrocnemius
- B. Soleus
- C. Sartorius
- D. Gluteus medius

ANSWER: B

10 It contains peripheral heart:

- A. Gastrocnemius
- B. Soleus
- C. Sartorius
- D. Plantaris

ANSWER: B

11. Which muscle passes through the greater sciatic foramen?

- A. Superior gemelus
- B. Obturator externus
- C. Obturator internus
- D. Piriformis

ANSWER: D

12. The muscle having action at its origin:

- A. Popliteus
- B. Plantaris
- C. Pectineus
- D. Lumbricals

ANSWER: A

13. Which of the following muscles is different from others?

- A. Rectus femoris
- B. Biceps femoris
- C. Quadratus plantae
- D. Gastrocnemius

ANSWER: D

14. Femoral vein receives blood from?

- A. External iliac vein
- B. Internal iliac vein
- C. Great saphenous vein

D. Internal thoracic vein

ANSWER: C

15. It performs its function in the unlocking of the knee joint:

A. Plantaris

B. Popliteus

C. Soleus

D. Gastrocnemius

ANSWER: B

16. It is situated between superior gemellus and inferior gemellus:

A. Obturator externus

B. Obturator internus

C. Piriformis

D. Quadratus femoris

ANSWER: B

17. It is inserted to the quadrate tubercle:

A. Quadriceps femoris

B. Quadratus plantae

C. Quadratus femoris

D. Rectus femoris

ANSWER: C

18. Iliotibial tract receives the insertion of:

A. Gluteus max. and gluteus min.

B. Gluteus med. and gluteus min

C. Gluteus max. and gluteus med.

D. Gluteus max. and tensor fascia

ANSWER: D

19. The greater sciatic foramen is formed by:

A. Sacrotuberous ligament & ischiotuberous ligament

B. Sacrotuberous ligament & sacrospinous ligament

C. Iliofemoral & pubofemoral ligaments

D. Iliofemoral & ischiofemoral ligaments

ANSWER: B

20. The medial femoral circumflex artery is the branch of:

A. Femoral artery

B. External iliac artery

C. Internal iliac artery

D. Profunda femoris artery

ANSWER: D

21. Rectus femoris takes origin from:

A. Anterior superior iliac spine

B. Anterior inferior iliac spine

C. Posterior superior iliac spine

D. Posterior inferior iliac spine

ANSWER: B

22. Which of the following structures is not present in the popliteal fossa?

A. Small saphenous vein

B. Saphenous nerve

C. Posterior cutaneous nerve of the thigh

D. Tibial nerve

ANSWER: B

23. In the extended knee joint with the foot on the ground the joint is unlocked by:

A. Medial rotation of femur

B. Lateral rotation of femur

C. Medial rotation of tibia

D. Lateral rotation of tibia

ANSWER: B

24. How many lymph nodes are present in the popliteal fossa?

A. 4

B. 6

C. 8

D. 10

ANSWER: B

25. Which nerve is subcutaneous?

A. Tibial nerve

B. Common peroneal nerve

C. Superficial peroneal nerve

D. Deep peroneal nerve

ANSWER: C

26. How many retinacula are present around the ankle?

A. 2

B. 3

C. 4

D. 5

ANSWER: D

27. Superficial peroneal nerve supplies:

A. Anterior compartment of leg

B. Posterior compartment of leg

C. Anteromedial surface of leg

D. Anterolateral surface of leg

ANSWER: D

28. Which muscle is attached to the tuberosity of the navicular bone?

A. Tibialis posterior

B. Tibialis anterior

C. Flexor halucis brevis

D. Peroneus tertius

ANSWER: A

29. Nutrient artery to the fibula is a branch of:

A. Anterior tibial artery

B. Posterior tibial artery

C. Peroneal artery

D. Genicular branch of femoral artery

ANSWER: C

30. The apex of aponeurosis is attached to

- A. Tuberosity of calcaneum
- B. Media tubercle of calcaneum
- C. Lateral tubercle of calcaneum
- D. Medial and lateral tubercles

ANSWER: D

31. The injection is given to the upper outer quadrant to save the damage to:

- A. Posterior cutaneous nerve of the thigh
- B. Inferior gluteal nerve
- C. Lateral cutaneous nerve of the thigh
- D. Sciatic nerve

ANSWER: D

32. The symphysis pubis is:

- A. Primary cartilaginous joint
- B. Secondary cartilaginous joint
- C. Synovial joint
- D. Fibrous joint

ANSWER: B

33 The floor of the acetabulum is non-articular called:

- A. Acetabular fossa
- B. Acetabular margin
- C. Acetabular notch
- D. Capsule

ANSWER: A

34. Intertrochanteric line is the connection between the two trochanters:

- A. Anteriorly
- B. Posteriorly
- C. Medially
- D. Laterally

ANSWER: A

35. Medial and lateral condyles of the femur are separated by:

- A. Intertrochanteric line
- B. Intertrochanteric crest
- C. Intercondylar notch
- D. Popliteal fossa

ANSWER: C

36. _____ bursae are usually associated with gluteus maximus.

- A. 1
- B. 2
- C. 3
- D. 4

ANSWER: C

37. Which muscle is pierced by sciatic nerve?

- A. Superior gemellus
- B. Inferior gemellus
- C. Piriformis
- D. Obturator externus

ANSWER: C

38. The increase in neck angle with the shaft of the femur is called:

- A. Coxa valga
- B. Coxa vara
- C. Coxa benda
- D. Coxa increase

ANSWER: A

39. The saphenous opening is situated 1.5 inch_____ pubic tubercle.

- A. Below
- B. Below and lateral
- C. Lateral
- D. Below and medial

ANSWER: B

40. The medial boundary of the femoral triangle is formed by:

- A. Adductor magnus
- B. Adductor longus
- C. Sartorius
- D. Iliopsoas

ANSWER: B

41. The lateral wall of adductor canal is formed by:

- A. Sartorius
- B. Vastus lateralis
- C. Vastus medialis
- D. Adductor longus

ANSWER: C

42. Branches of the femoral artery include all except:

- A. Superficial epigastric artery
- B. Superior epigastric artery
- C. Deep external pudendal artery
- D. Profunda femoris artery

ANSWER: B

43. Which is the largest?

- A. Rectus femoris
- B. Vastus lateralis
- C. Vastus medialis
- D. Vastus intermedius

ANSWER: B

44. Muscular branches of the posterior division of obturator nerve supply:

- A. Sartorius
- B. Iliopsoas
- C. Pectineus
- D. Quadriceps

ANSWER: C

45 The posterior division of obturator nerve pierces:

- A. Piriformis
- B. Obturator externus
- C. Obturator internus
- D. Superior gemellus

ANSWER: B

46. It looks like inverted Y shaped:

- A. Iliofemoral ligament
- B. Pubofemoral ligament
- C. Ischiofemoral ligament
- D. Plantar aponeurosis

ANSWER: A

47. Pes anserinus receives the insertion of all except:

- A. Semitendinosus
- B. Sartorius
- C. Gracilis
- D. Adductor magnus (hamstring portion)

ANSWER: D

48. Circumduction is the combination of?

- A. Flexion, extension, medial rotation, and lateral rotation
- B. Flexion, extension, abduction, and adduction
- C. Abduction, adduction, medial rotation, and lateral rotation
- D. Extension, adduction, medial rotation, and lateral rotation

ANSWER: B

49. Sustentaculum tali is located on _____ of calcaneus.

- A. Medial surface
- B. Lateral surface
- C. Anterior surface

D. Superior surface

ANSWER: A

50. A metatarsal bone has the following basic parts:

A. Head, shaft, and tail

B. Head, shaft, and base

C. Head, neck, tubercle, and base

D. Head, neck, tubercle, and tail

ANSWER: B

51. One of these arteries participates in trochanteric anastomosis:

A. Descending genicular arteries

B. Ascending genicular arteries

C. Inferior gluteal artery

D. Middle gluteal artery

ANSWER: C

52. Femoral hernia is more common in:

A. Men

B. Women

C. Children

D. Old age

ANSWER: B

54. It passes upward, backward and laterally to be attached to the posterior part of the medial surface of the lateral femoral condyle:

A. Anterior cruciate ligament

- B. Posterior cruciate ligament
- C. Medial collateral ligament
- D. Lateral collateral ligament

ANSWER: A

55. Cutaneous innervation to the hallux:

- A. Sural nerve
- B. Deep peroneal nerve
- C. Saphenous nerve
- D. Lateral plantar nerve

ANSWER: B

56. Lumbosacral plexus is formed by:

- A. L1-S1
- B. L2-S2
- C. L3-S3
- D. L4-S4

ANSWER: D

57. Deep inguinal lymph nodes are found around:

- A. Great saphenous vein
- B. Popliteal vein
- C. Femoral vein
- D. External iliac vein

ANSWER: C

58. Cloquet node drains

- A. Scrotum
- B. Vagina
- C. Vulva
- D. Glans penis

ANSWER: D

59. Pelvic drop is injury to:

- A. Superior gluteal nerve
- B. Inferior gluteal nerve
- C. Superior gluteal artery
- D. Inferior gluteal artery

ANSWER: A

60. Inversion takes place at?

- A. Hip joint
- B. Knee joint
- C. Proximal tibiofibular joint
- D. Ankle joint

ANSWER: D

61. Small saphenous vein travels with?

- a. Saphenous nerve
- b. Sural nerve
- c. Posterior cutaneous nerve
- d. Anterior cutaneous nerve

ANSWER: B

62. Incompetent valves in the leg cause

- a. Thick veins
- b. Varicose veins
- c. Thin veins
- d. Turgid veins

ANSWER: B

63. Communicating venous system goes from

- a. Deep→Superficial
- b. Superficial →Deep
- c. Medial→Lateral
- d. Lateral→Medial

ANSWER: B

64. Deep venous thrombosis can be treated using

- a. Analgesics
- b. Antipyretics
- c. Anticonvulsants
- d. Anticoagulants

ANSWER: D

65. Clunial nerve supplies

- a. Leg
- b. Gluteal region
- c. Dorsum of the foot
- d. Sole

ANSWER: B

66. Which of these is not a branch of lumbosacral plexus?

- a. Subcostal nerve
- b. Ilioinguinal nerve
- c. Iliofemoral nerve
- d. Femoral nerve

ANSWER: A

67. Injury to femoral nerve include all except?

- a. Weakened flexion of the thigh
- b. Loss of extension of leg
- c. Sensory loss in the medial leg
- d. Lateral rotation of the leg

ANSWER: D

68. Foot slap is caused by

- a. Common peroneal nerve
- b. Deep peroneal nerve
- c. Superficial peroneal nerve
- d. Tibial nerve

ANSWER: A

69. Which of these ligaments is weakest?

- a. Iliofemoral
- b. Pubofemoral
- c. Ischiofemoral
- d. Ligament of the head of femur

ANSWER: D

70. In adults, ligament of the head of femur is replaced by?

- a. Medial circumflex artery
- b. Obturator artery
- c. Gluteal artery
- d. Profunda femoris artery

ANSWER: A

71. Fascia lata is not:

- a. Attached inferiorly to the tibial condyles and head of the fibula
- b. Reinforced anteriorly by expansions from the quadriceps tendon
- c. Attached to Scarpa's fascia above the inguinal ligament
- d. Continuous below the popliteal fossa into the deep fascia of the calf

ANSWER: D

72. Which of this false about iliotibial tract:

- a. Lies lateral to tensor fascia latae
- b. Inserts onto the head of the fibula
- c. Is the insertion of 60% of gluteus maximus
- d. Is a weak flexor of the knee via tensor fascia latae

ANSWER: B

73. Which of the following muscles is not found in the floor of the femoral triangle?

- a. Iliopsoas
- b. Pectineus
- c. Adductor magnus
- d. Adductor longus

ANSWER: C

74. Which of the following is allows for expansion within the femoral sheath?

- a. Femoral artery
- b. Femoral canal
- c. Femoral nerve
- d. Lymph node of Cloquet

ANSWER: B

75. Which of these adductor muscles is dispensable?

- a. Adductor longus
- b. Adductor brevis
- c. Adductor magnus
- d. Gracilis

ANSWER: D

76. Deltoid ligament is found in:

- a. Shoulder joint
- b. Hip joint
- c. Knee joint
- d. Ankle joint

ANSWER: D

77. Which part of talus is involved in ankle joint?

- a. Head
- b. Neck
- c. Trochlear
- d. Body

ANSWER: C

78. Occurs at the subtalar joint

- a. Dorsiflexion
- b. Plantarflexion
- c. Inversion
- d. Sliding

ANSWER: C

79. Lovelock's fracture occurs at

- a. Talocrural joint
- b. Subtalar joint
- c. Transverse tarsal joint
- d. Tarsometatarsal joint

ANSWER: B

80. Which of the metatarsals has a tuberosity?

- a. 2
- b. 3
- c. 4
- d. 5

ANSWER: D

1. The articular part of a rib tubercle articulates with which of the following structures?

- A. Body of the vertebra
- B. Costal cartilage
- C. Adjacent rib
- D. Transverse process

ANSWER: B

2. Which of the following is a special feature of a thoracic vertebra?

- A. foramen for vertebral artery
- B. costal facets on bodies
- C. dens for rotation
- D. short spinous processes

ANSWER: B

3. Which of the following is true about thoracic vertebra?

- A. The lamina is located between transverse process and centrum
 - B. The pedicel is located between the transverse and spinous process
 - C. The vertebral body is oval shaped
 - D. Presence of demi-facets on the sides of each vertebral body
- ANSWER: D

4. The shape of the thoracic vertebra body is
- A. Oval
 - B. Heart
 - C. ellipsis
 - D. oblong
- ANSWER: B

5. Regarding the anterior body wall
- A. The umbilicus receives cutaneous innervation from T8
 - B. The neurovascular bundle lies between the external and the internal intercostal muscles
 - C. The nipple receives cutaneous innervation from T6
 - D. The intercostal nerve lies inferior to the intercostal artery
- ANSWER: D

6. The oesophageal opening in the diaphragm transmits all except:
- A. Vagal nerve trunk
 - B. Oesophageal branches of gastric artery
 - C. Lymphatics
 - D. Right phrenic nerve
- ANSWER: D

7. Which is not a feature of a typical rib?
- A. Medial facet of the tubercle faces backwards
 - B. Angle is the most posterior point
 - C. Necks are all of equal length
 - D. There are 3 costotransverse ligaments
- ANSWER: C

8. Which of the following is not true of the surface markings of the left pleura?
- A. It lies behind the sternoclavicular joint
 - B. It lies in the midline behind the angle of Louis
 - C. It lies at the level of the 6th rib in the midclavicular line
 - D. It crosses the midaxillary line at the level of the 10th rib
- ANSWER: C

9. In the chest wall
- A. The intercostal artery is more superficial than the vein
 - B. The intercostal artery lies between the intercostal nerve and vein
 - C. The transverses muscle lies between the external and internal intercostals

D. The neurovascular bundle lies between the external and internal intercostals

ANSWER: B

10. The right crus of the diaphragm is attached which vertebrae levels?

A. L1-L2

B. L1-L3

C. L1-L4

D. L1-L5

ANSWER: B

11. Pleural reflection lies at which rib level in the midaxillary line?

A. 6th

B. 8th

C. 10th

D. 12th

ANSWER: D

12. The vena caval opening foramen in the diaphragm lies at the level of

A. T12

B. T8

C. T10

D. L1

ANSWER: B

13. Regarding the descending part of the thoracic aorta

A. It begins at the level of T3 vertebra

B. It passes through the diaphragm behind the lateral arcuate ligament

C. It begins at the beginning of the arch of the aorta

D. It passes to the abdomen at the level of T12

ANSWER: D

14. Which of the following are innervated by dorsal rami?

A. levatores costarum

B. external intercostals

C. internal intercostals

D. serratus posterior inferior

ANSWER: A

15. Sternal foramen is a defect of the

A. Manubrium sterni

B. Corpus sterni

C. Xiphoid sterni

D. Xiphoid process

ANSWER: B

16. Thoracic cage lower aperture is formed is formed by the following except

A. The L1 vertebra

B. The lower 6 coastal cartilages

- C. The 12th ribs
 - D. The xiphoid process in front and the body of the 12th thoracic vertebra behind
- ANSWER: A

17. Parietal layer lines the following pleural cavity except

- A. Costal pleura
- B. Mediastinal pleura
- C. Diaphragmatic pleura
- D. Pericardial pleura

ANSWER: D

18. Which of the following statements concerning the sternal angle is correct?

- A. It lies at the level of the intervertebral disk between T4/T5.
- B. It is flanked by the costal cartilage of the 3rd pair of costal cartilages.
- C. It is crossed by the superior epigastric artery
- D. It located 3mm superior to the jugular notch

ANSWER: A

19. In respect to SA node

- A. Composed of peculiar, concentric striated cells
- B. It only effect cardiac output
- C. It is only supplied by left coronary artery
- D. It is supplied by left vagus nerve

ANSWER: D

20. The followings are true of the sympathetic nerve supply to esophagus except

- A. Postganglionic axons form the greater splanchnic nerve.
- B. Preganglionic axons form the greater splanchnic nerve.
- C. Postganglionic neuronal cell bodies are located in diffuse ganglia along the esophagus and celiac ganglion.
- D. Postganglionic axons synapse in the complex circuitry of the enteric nervous system.

ANSWER: A

21. The 11th and 12th ribs are

- A. Vertebrosteral ribs
- B. Vertebrochondral ribs
- C. Vertebral ribs
- D. No ribs

ANSWER: C

22. All the following statements are true of the left lung except

- A. It is divided into upper and lower lobes by an oblique fissure
- B. It contains no lingula
- C. It contains a cardiac notch
- D. It receives 2 bronchial arteries.

ANSWER: B

23. The following are correct fact on thymus except
- A. It is a bilobed structure in the superior mediastinum
 - B. It has immune system in early life
 - C. Behind it is the arch of the aorta with its three large branches
 - D. It is a lifetime immune system.

ANSWER: D

24. The pleural cavity contains which of the following?
- A. Bronchi
 - B. Serous pleural fluid
 - C. Lymph nodes
 - D. Pulmonary arteries and veins

ANSWER: B

25. The musculophrenic arteries give rise to which of the following?
- A. anterior intercostal arteries for intercostal spaces 7–9
 - B. posterior intercostals arteries for intercostal spaces 3–11
 - C. subcostal artery
 - D. inferior phrenic artery

ANSWER: A

26. Regarding surface markings of the lungs the following is true
- A. Oblique fissure follows approximately the axis of 6th rib
 - B. The two pleura diverge away at 6th costal cartilage level behind sternum
 - C. Transverse fissure of right lung is at 6th costal cartilage level
 - D. Oblique fissure following medial border of scapula on abducted arm

ANSWER: D

27. Which heart valve has two cusps?
- A. Aortic
 - B. Mitral
 - C. Pulmonary
 - D. Pulmonary and aortic

ANSWER: B

28. Which of the following statement is false about Pleura recesses?
- A. The costodiaphragmatic recesses are the regions between the inferior margin of the lungs and inferior margin of the pleural cavities.

- B. The costodiaphragmatic recesses are deepest after forced expiration and shallowest after forced inspiration.
- C. The costomediastinal recess is largest is on the right side in the region overlying the heart
- D. The costomediastinal recess occurs on each side where costal pleura is opposed to mediastinal pleura

ANSWER: C

29. All of the following statements correctly apply to the right lung EXCEPT
- A. The superior and oblique fissures divide it into three lobes.
 - B. It is larger and heavier than the left lung.
 - C. It is shorter and wider than the left lung.
 - D. It contains a thin, tongue-like process called the lingula.

ANSWER: D

30. The parietal pleura consists of all of the following parts EXCEPT
- A. Costal
 - B. Pericardial
 - C. Mediastinal
 - D. Cervical

ANSWER: B

31. The most superior structure at the root of the left lung is
- A. Pulmonary artery
 - B. Pulmonary vein
 - C. Left main bronchus
 - D. Bronchial arteries

ANSWER: A

32. In the lung
- A. The fissures create a roughened surface to promote easier expansion
 - B. The obliquity of the fissure ensures better expansion of the apex of the lung
 - C. The lingula is a separate lobe of the left side
 - D. Only 2% of lungs have incomplete oblique fissures

ANSWER B

33. The right phrenic nerve
- A. Passes down through the mediastinum posterior to the lung root
 - B. Is the sole motor supply to the right dome of diaphragm and crus
 - C. Gives off the right recurrent laryngeal nerve in the neck
 - D. Contains 50% motor and 50% sensory fibres

ANSWER: B

34. Which statement is not true in respect to left atrium

- A. It forms 2/3 of the back of the heart
- B. The cubical auricle is smooth
- C. It is demarcated from the left ventricle below by the coronary sinus
- D. The interatrial septum is obliquely set

ANSWER: B

35. Of the bronchopulmonary segments in the superior lobe of the left lung, which two are combined to form the lingula?

- A. apical and posterior
- B. posterior and anterior
- C. superior and inferior
- D. anterior and superior

ANSWER: C

36. Sympathetic nerves do NOT contribute to which of the following?

- A. diaphragm
- B. bronchial muscle
- C. pulmonary vessels
- D. alveolar glands of the bronchial tree

ANSWER: A

37. Which of the following structures is located in the middle mediastinum?

- A. Thoracic duct
- B. Lungs
- C. Heart
- D. Azygos vein

ANSWER: C

38. All of the following statements correctly apply to the right atrium EXCEPT

- A. It receives blood from the superior and inferior vena cava and coronary sinus.
- B. It contains the crista terminalis.
- C. It contains the limbus fossae ovalis.
- D. It contains trabeculae carneae.

ANSWER: D

39. The aortic valve consist of the following except

- A. Anterior semilunar cusp
- B. Right semilunar cusp
- C. Posterior semilunar cusp
- D. Left semilunar cusp

ANSWER: A

40. The interventricular septum contains which of the following structures?

- A. Anterior papillary muscle
- B. Sinus venarum
- C. Sinoatrial node
- D. Conus arteriosus

ANSWER: A

41. The most superficial structure in the thoracic inlet is

- A. Right subclavian artery
- B. Left subclavian artery
- C. Thoracic duct
- D. Superior vena cava

ANSWER: D

42. The diaphragm

- A. Is supplied by the 5th, 6th and 7th cervical nerve roots
- B. Has a major role in expiration
- C. Has a vena caval foramen opposite T10 vertebra
- D. Has an aortic opening opposite T12 vertebra

ANSWER: D

43. In the thorax

- A. The thoracic duct drains into the superior vena cava
- B. C4 and T3 are adjacent dermatomes
- C. The trachea lies in contact with the manubrium
- D. The apex of the lung is above the thoracic inlet

ANSWER: C

44. A unit of four parallel structures crossed by the aortic arch include the following except

- A. Trachea
- B. Right recurrent laryngeal nerve
- C. Esophagus
- D. Thoracic duct

ANSWER: B

45. The septomarginal trabecula (moderator band) is associated with the:

- A. Right Atrium
- B. Right Ventricle

- C. Left Atrium
 - D. Left Ventricle
- ANSWER: B

46. Which of the following structures carry highly oxygenated blood from the lungs to the heart?

- A. Pulmonary arteries
- B. Pulmonary veins
- C. Coronary arteries
- D. Cardiac veins

ANSWER: B

47. Which of the following structures is located in the posterior mediastinum?

- A. Lungs
- B. Azygos vein
- C. Superior vena cava
- D. Right coronary artery

ANSWER: B

48. All of the following statements concerning the pericardium are correct EXCEPT

- A. The external layer of the sac is fibrous.
- B. The internal layer is reflected onto the heart as the visceral serous layer (epicardium).
- C. The internal layer of the fibrous sac is the parietal serous layer.
- D. The fibrous pericardium is attached to the sternum by the pericardiophrenic ligament.

ANSWER: D

49. All of the following veins drain into the coronary sinus EXCEPT

- A. Anterior cardiac
- B. Small cardiac
- C. Middle cardiac
- D. Great cardiac

ANSWER: A

50. All of the following statements concerning the sinoatrial node are correct EXCEPT

- A. It is located near the superior end of the sulcus terminalis.
- B. It is located at the junction of the superior vena cava and the right atrium.
- C. It is known as the pacemaker of the heart.
- D. It is avascular.

ANSWER: D

51. All of the following statements correctly apply to the right coronary artery EXCEPT

- A. Typically supplies the SA node in approximately 60% of people.
- B. Typically supplies the AV node in approximately 80% of people.
- C. Arises from the arch of the aorta.
- D. Runs in the coronary sulcus.

ANSWER: C

52. Which of the following structures is located in the left atrium?

- A. pectinate muscle
- B. pulmonary semilunar valves
- C. septomarginal trabeculae
- D. septal papillary muscle

ANSWER: A

53. Which of the following is not true of the surface markings of the left pleura?

- A. It lies behind the sternoclavicular joint
- B. It lies in the midline behind the angle of Louis
- C. It lies at the level of the 6th rib in the midclavicular line
- D. It crosses the midaxillary line at the level of the 10th rib

ANSWER: C

54. In the anatomical position, the heart:

- A. Has a right border comprised of right atrium and right ventricle
- B. Has an anterior (sternocostal) surface comprised of right atrium, right ventricle and a strip of left ventricle
- C. Has a posterior surface comprised of left atrium, 4 pulmonary veins and left ventricle
- D. Has an inferior (diaphragmatic) surface comprised of left atrium, inferior vena cava and right ventricle

ANSWER: B

55. With respect to the contents of the posterior mediastinum, all are true except:

- A. The oesophagus extends from the level of cricoid cartilage to traverse the diaphragm at T10
- B. The descending thoracic aorta gives off the posterior intercostals arteries
- C. It contains the perihilar lymph nodes
- D. The oesophagus is 25cm in length

ANSWER: C

56. Which is true of the sternum?

- A. Jugular notch lies at the level of T4
- B. 2nd costal cartilage articulates separately with the manubrium and the body of the sternum
- C. sternohyoid attaches to the manubrium, below the 1st costal cartilage
- D. interclavicular ligament makes no attachment to the sternum

ANSWER: B

57. Which is not a feature of a typical rib?

- A. Medial facet of the tubercle faces backwards

- B. Angle is the most posterior point
- C. Necks are all of equal length
- D. There are 3 costotransverse ligaments

ANSWER: C

58. Phrenic nerve supplies the sensation to all but

- A. Diaphragm
- B. Mediastinal pleura
- C. Peritoneum
- D. Left ventricle

ANSWER: D

59. Which is true of the vagus nerves?

- A. Left vagus is held away from the trachea by branches of the aortic arch
- B. Run in front of the lung roots
- C. Vagal trunks receive fibres from the ipsilateral nerve only
- D. Left vagus crosses the aortic arch superficial to the left superior intercostal vein

ANSWER: A

60. What lies posterior to the right root of lung

- A. Aorta
- B. Right phrenic nerve
- C. Right vagus nerve
- D. Arch of aorta

ANSWER: C

61. The transverse pericardial sinus lies:

- A. posteriorly to the ascending aorta and the pulmonary trunk, anteriorly to the superior vena cava, and superiorly to the left atrium.
- B. posteriorly to the ascending aorta and the pulmonary trunk, posteriorly to the superior vena cava, and superiorly to the left atrium.
- C. anteriorly to the ascending aorta and the pulmonary trunk, posteriorly to the superior vena cava, and superiorly to the left atrium.
- D. anteriorly to the ascending aorta and the pulmonary trunk, posteriorly to the superior vena cava, and inferiorly to the left atrium.

ANSWER: A

62. The proximal and distal attachments of internal intercostals are

- A. Originate from the medial edge of the costal groove and insert into the superior surface of the rib below.
- B. Originate from the medial edge of the costal groove and insert into the inferior surface of the rib below.
- C. Originates from the lateral edge of the costal groove and inserts into the superior surface of the rib below.
- D. Originate at the lower border of the rib, inserting into the superior border of the rib below.

ANSWER: C

63. The main action of transversus thoracis are

- A. Weakly depress the ribs.
- B. Weakly elevate the ribs.
- C. Weakly depress the sternum.
- D. Weakly elevate the sternum.

ANSWER: A

64. Which of the following is correct regarding hilum of right lung

- A. Thoracic duct arches over it
- B. Azygos vein arches over anterior surface
- C. Arch of aorta is related to its anterior surface
- D. Pressed by lingual

ANSWER: B

65. Esophagus is a 25 cm structure made up of

- A. Upper 50% smooth muscle only
- B. Middle 50% skeletal only
- C. Middle 50% smooth muscle only
- D. Distal 50% smooth muscle only

ANSWER: D

66. The esophagus is compressed by the following structure except

- A. The arch of the aorta
- B. The left main bronchus
- C. The diaphragm
- D. The pericardium

ANSWER: D

67. In respect of the Left lung

- A. It receives only 1 bronchial artery
- B. It receives 2 bronchial arteries
- C. It receives 3 bronchial arteries
- D. It receives 4 bronchial arteries.

ANSWER: B

68. The aortic arch crosses these structures as a unit except

- A. Thoracic duct
- B. Trachea
- C. Bronchi
- D. Esophagus

ANSWER: C

69. Regarding the right coronary artery

- A. Course through the left auricle and infundibulum
- B. Supplies 60% of AV nodes
- C. Usually has a posterior interventricular branch
- D. Supplies 30% of SA nodes

ANSWER: C

70. The thoracic duct

- A. Commences level with the body of T10
- B. Enters the point of confluence of the left internal jugular and axillary vein
- C. Receives the left jugular and subclavian lymph trunks
- D. Receives lymph from the right thoracic wall

ANSWER: C

71. The trachea

- A. Drains to axillary lymph nodes
- B. Is supplied by glossopharyngeal nerve
- C. Is marked at its lower end by the sternal angle
- D. Enters the thoracic inlet slightly to the left

ANSWER: C

72. The most superficial structure in the thoracic inlet is the

- A. Vagus nerve
- B. Superior vena cava
- C. Right subclavian artery
- D. Left subclavian artery

ANSWER: B

73. Which passes through the diaphragm with the oesophagus?

- A. Azygos vein
- B. Right vagus
- C. Sympathetic trunks
- D. Thoracic duct

ANSWER: B

74. Which muscle is NOT used in forced expiration?

- A. Transverses abdominis
- B. Rectus abdominis
- C. Diaphragm
- D. External oblique

ANSWER: C

75. Which vessel passes directly behind the right hilum?

- A. Right phrenic nerve
- B. Right vagus nerve

- C. Azygos vein
 - D. Internal mammary artery
- ANSWER: C

76. In the superior mediastinum
- A. The apex of the left lung abuts the trachea
 - B. The left vagus is in contact with the trachea
 - C. The right phrenic descends in contact with SVC
 - D. The azygos vein hooks under the right main bronchus
- ANSWER: C

77. The major arterial supply to the interventricular septum originates from the
- A. Circumflex artery
 - B. Marginal artery
 - C. Posterior descending
 - D. Anterior descending
- ANSWER: C

78. Regarding the heart valves:
- A. The aortic valve usually has two semilunar cusps
 - B. The pulmonary valve is at the level of the 3rd costal cartilage
 - C. They do not contain elastic fibres
 - D. The tricuspid valve has anterior, posterior and medial cusps
- ANSWER: B

79. The cardiac plexus:
- A. Has a larger superficial part and a smaller deep part
 - B. Is made up of sympathetic and parasympathetic fibres only
 - C. Receives fibres from the left vagus nerve and left cervical sympathetic ganglion only into the superficial part
 - D. The deep part lies to the left of the ligamentum arteriosum
- ANSWER: C

80. The azygous vein:
- A. Has an avascular fibrous cord in the abdomen
 - B. Begins as the union of ascending lumbar vein with the subcostal vein on the left side
 - C. Arches over the right pulmonary artery
 - D. Receives veins from the upper third of the oesophagus
- ANSWER: A

The cardiovascular system is derived mainly from the following EXCEPT:

- A. Splanchnic endoderm, which forms the primordium of the heart
- B. Paraxial mesoderm near the otic placodes from which the internal ears develop

- C. Neural crest cells from the region between the otic vesicles and the caudal limits of the third pair of somites
- D. lateral mesoderm near the otic placodes from which the internal ears develop

ANSWER: A

Which of the following statements is NOT correct?

- A. A 6-week old embryo has two umbilical veins
- B. The posterior cardinal veins drain poorly oxygenated blood from the caudal end of the embryo into the common cardinal vein
- C. Blood is supplied to the yolk sac by the vitelline vein
- D. The umbilical veins run on each side of the liver and carry well-oxygenated blood from the placenta to the sinus venosus in a 5-week old embryo

ANSWER: C

One of the followings is NOT correct during partitioning of the heart:

- A. The ventral and dorsal atrioventricular endocardial cushions fuse in the 5th week of embryonic development
- B. Apoptotic perforations in the septum secundum coalesce to form the foramen secundum
- C. The valve of oval foramen fuses completely with septum secundum approximately 3 months after birth
- D. The interventricular septum is formed from both ventricular floor and the endocardial cushions

ANSWER: B

Which of the following statements is CORRECT during the development of the epidermis?

- A. The stratum corneum becomes a component of vernix caseosa
- B. The stratum germinativum develops from the mesoderm
- C. The intermediate layer is as a result of proliferations from the stratum germinativum
- D. The subcutaneous ridges produce grooves on the surface of the palms, the soles and digits serve as a basis of genetically unique fingerprint patterns

ANSWER: C

One of the following statements is NOT correct:

- A. Athelia is a congenital abnormality of the nipple
- B. Localized hypertrichosis is often associated with spina bifida occulta
- C. Development of fingernails precedes that of toenails by approximately 4 weeks
- D. The dermis can be bypassed in the nourishment of the developing epidermis

ANSWER: D

All of the followings are derivatives of the foregut and its tissues EXCEPT:

- A. Kidneys
- B. Spleen
- C. Gall Bladder
- D. Pancreas

ANSWER: A

All of the followings are derivatives of the midgut and its tissues EXCEPT:

- A. Pyloroduodenal junction
- B. Proximal one half to two thirds of the transverse colon
- C. Jejunum
- D. Vermiform appendix

ANSWER: A

All of the followings are derivatives of the hindgut and its tissues EXCEPT:

- A. Descending colon
- B. Distal one third to one half of the transverse colon
- C. Rectum
- D. Distal 1/3rd of anal canal

ANSWER: D

The first major system to start functioning in a developing embryo is:

- A. Respiratory system
- B. Cardiovascular system
- C. Integumentary system
- D. Gastrointestinal system

ANSWER: B

The Sinus Venosus receives the followings EXCEPT:

- A. Umbilical veins, from the chorion
- B. Vitelline veins, from the umbilical vesicle
- C. Aortic veins, from the yolk sac
- D. Common cardinal veins, from the embryo

ANSWER: C

Which of the following statements is NOT CORRECT about partitioning of the atrioventricular canal, primordial atrium, and ventricle?

- A. It begins around the middle of the fourth week
- B. It is essentially completed by the end of the fifth week.
- C. Although described separately, these processes occur concurrently
- D. Toward the end of the fourth week, endocardial cushions form on the dorsal and ventral walls of the atrioventricular (AV) canal

ANSWER: B

Tetralogy of Fallot includes the following defects EXCEPT:

- A. Pulmonary stenosis (obstruction of right ventricular outflow)
- B. Atrial Septal Defect
- C. Dextroposition of aorta (overriding or straddling aorta)
- D. Right ventricular hypertrophy

ANSWER: B

Which of the followings is structurally NOT an integument?

- A. Tongue
- B. Teeth
- C. Nails
- D. Breast

ANSWER: A

One of the followings is NOT CORRECT about the respiratory system:

- A. The respiratory system develop from a median diverticulum of the foregut (endoderm).
- B. The diverticulum divides into right and left lung buds.
- C. The larynx and trachea develop below the division of diverticulum
- D. The lung buds undergo repeated division to establish the bronchial tree and alveoli of the lung

ANSWER: C

One of the following derivatives is NOT supplied by the superior mesenteric artery?

- A. Jejunum
- B. Descending colon
- C. Ascending colon
- D. Appendix

ANSWER: B

One of the following derivatives is NOT supplied by the inferior mesenteric artery?

- A. Rectum
- B. Descending colon
- C. Distal half or 1/3rd of the transverse colon
- D. Proximal half or 2/3rd of the transverse colon

ANSWER: D

The celiac trunk supplies one of the following derivatives:

- A. Appendix
- B. Jejunum
- C. Stomach
- D. Ileum

ANSWER: C

The most common anomaly of the lower respiratory tract is:

- A. Tracheoesophageal Fistula
- B. Laryngotracheoesophageal Cleft
- C. Tracheal Diverticulum
- D. Oligohydramnios

ANSWER: A

One of this is NOT CORRECT about the partitioning of the ventricles:

- A. The muscular part of the interventricular septum is derived from the endocardial cushion
- B. The membranous part of the interventricular septum is the weakest
- C. Perforations in the muscular part of the interventricular septum can also be a rare type of VSD
- D. The absence of a ventricular septum results in a three-chambered heart

ANSWER: A

In the placenta, which of the following is NOT CORRECT?

- A. There is a direct mixing of blood between the maternal and the embryonic blood vessels
- B. The umbilical artery supplies into the umbilical veins in the placenta to return blood to the embryo
- C. Gaseous and nutrient exchange is mainly by diffusion
- D. The placenta has two components that develops from the chorionic sac and maternal endometrium

ANSWER: A

One of these is a derivative of the hindgut:

- A. Vermiform Appendix
- B. Proximal half or 2/3rd of Transverse colon
- C. Distal half or 1/3rd of transverse colon
- D. Ileum

ANSWER: C

One of these is a derivative of the midgut:

- A. Distal duodenum after pancreatic duct ampulla
- B. Proximal part of duodenum before the entrance of pancreatic duct
- C. Pyloroduodenal junction
- D. Liver

ANSWER: A

One of these is NOT an anomaly of the integumentary system:

- A. Kyphosis
- B. Ichthyosis
- C. Polymastia
- D. Albinism

ANSWER: A

In Tetralogy of Fallot, supply of poorly oxygenated blood to the body of embryo from the heart results mainly from which of the following:

- A. Pulmonary stenosis
- B. Overriding aorta
- C. Ventricular hypertrophy
- D. Ventricular septal defect

ANSWER: B

Which part of these atria and ventricular septa is the weakest and most prone to be defective?

- A. Oval fossa of the Atrial septum
- B. Septum primum of the Atrial septum
- C. Membranous part of the Ventricular septum
- D. Muscular part of the Ventricular septum

ANSWER: C

One of the following statements is NOT CORRECT:

- A. Lateral embryonic folding is mainly responsible for the fusion of two cardiac tubes into a single one
- B. The fusion of the two cardiac tubes is first completed cranially before the caudal part
- C. This single heart tube has only one chamber till birth
- D. The position of the apex of heart can be mirrored in some cases

ANSWER: C

The most powerful chamber of the heart is:

- A. Right Ventricle
- B. Right Atrium
- C. Left Ventricle
- D. Left Atrium

ANSWER: C

The venae cavae develop from which of the followings?

- A. Bulbus cordis
- B. Sinus venosus
- C. Truncus arteriosus
- D. Primitive ventricle

ANSWER: B

The Ascending Aorta develops from:

- A. Bulbus cordis
- B. Sinus venosus
- C. Truncus arteriosus
- D. Primitive ventricle

ANSWER: C

The Right ventricle develops from:

- A. Bulbus cordis
- B. Sinus venosus
- C. Truncus arteriosus
- D. Primitive ventricle

ANSWER: A

The small intestine is fixed to the posterior abdominal wall by:

- A. Ligaments
- B. Tendons
- C. Mesenteries
- D. Joints

ANSWER: C

The structure mass present in the centre of a primordial heart tube to which the septum primum and membranous interventricular septum attach to is called:

- A. Cardiac mesenchyme
- B. Endocardial cushion
- C. Internal cushion
- D. Cardiac mass

ANSWER: B

Which of the following is exfoliated from the surface of the developing epidermis, to become added to vernix caseosa?

- A. Ectoderm
- B. Periderm
- C. Mesoderm
- D. Endoderm

ANSWER: B

The cheesy, whitish substance seen on a newly born baby is known as:

- A. Varnish Caseosa
- B. Varnix Casiosa
- C. Vernix Caseosa
- D. Varnish Casiosa

ANSWER: C

One of these is NOT a function of vernix caseosa:

- A. Easy of delivery of fetus at term
- B. Protection of fetal skin from high urine content of the amniotic fluid
- C. Glossy appearance of fetus
- D. Development of epidermal ridges

ANSWER: D

One of these is not a layer of the epidermis:

- A. Stratum lucidum
- B. Stratum basalis
- C. Stratum granulosum
- D. Stratum cornea

ANSWER: D

The layer that contains melanocytes in the epidermis is:

- A. Stratum lucidum
- B. Stratum germinativum
- C. Stratum granulosum
- D. Stratum cornea

ANSWER: B

The outermost layer of the epidermis is:

- A. Stratum granulosum
- B. Stratum corneum
- C. Stratum germinativum
- D. Stratum lucidum

ANSWER: B

All layers of the epidermis are produced from which of these layers?

- A. Stratum granulosum
- B. Stratum corneum
- C. Stratum germinativum
- D. Stratum lucidum

ANSWER: C

Epidermal ridges are formed by proliferating cells of which layer?

- A. Stratum lucidum
- B. Stratum basalis
- C. Stratum granulosum
- D. Stratum cornea

ANSWER: B

Patterns on Fingerprints, Palm prints, prints of sole and toes are all derived from the pattern formed by:

- A. Dermal Ridges
- B. Epidermal Ridges
- C. Ectodermal Ridges
- D. Endodermal Ridges

ANSWER: B

One of these statements is NOT CORRECT:

- A. Epidermis is derived from the surface ectoderm
- B. Dermis is derived from underlying endoderm
- C. Fingerprint patterns are uniquely established in individuals by epidermal ridges
- D. Fingerprint patterns are uniquely established in individuals by dermal ridges

ANSWER: D

One of these is NOT CORRECT about albinos:

- A. They lack melanin
- B. They lack melanocytes
- C. They may have melanin but in small amounts
- D. They have melanocytes

ANSWER: B

Which of these veins drain the umbilical vesicles?

- A. Vitelline veins
- B. Umbilical veins
- C. Anterior cardinal veins
- D. Posterior cardinal veins

ANSWER: A

Which of these veins return blood from the placenta to the embryo?

- A. Vitelline veins
- B. Umbilical veins
- C. Anterior cardinal veins
- D. Posterior cardinal veins

ANSWER: B

Which of these veins drain the cranial end of the embryo?

- A. Vitelline veins
- B. Umbilical veins
- C. Anterior cardinal veins
- D. Posterior cardinal veins

ANSWER: C

Which of these veins drain the caudal end of the embryo?

- A. Vitelline veins
- B. Umbilical veins
- C. Anterior cardinal veins
- D. Posterior cardinal veins

ANSWER: D

Which of these veins transports richly oxygenated blood?

- A. Vitelline veins
- B. Umbilical veins
- C. Anterior cardinal veins
- D. Posterior cardinal veins

ANSWER: B

Which of the following systems is the first to start function in embryos?

- A. Integumentary system

- B. Respiratory system
- C. Cardiovascular system
- D. Urogenital system

ANSWER: C

One of the following statements is NOT correct:

- A. Amastia is a congenital abnormality of the nipple
- B. Localized hypertrichosis is often associated with spina bifida occulta
- C. Development of fingernails precedes that of toenails by approximately 4 weeks
- D. The dermis cannot be bypassed in the nourishment of the developing epidermis

ANSWER: A