

xiv. **Assertion:** While performing the Trendelenburg test, tilt of the pelvis is observed

Reason: It tests the integrity of gluteus maximus

xv. **Assertion:** Aspirated foreign bodies are lodged in the right principal bronchus.

Reason: The right principal bronchus is shorter, wider and in line with the trachea

Question numbers xvi-xx are multiple response type questions. Read the statements & mark the answers appropriately.

xvi. The phrenic nerves:

- 1) Arise from the cervical plexus roots 3, 4, 5
- 2) Gives sensory branches to the mediastinal and central diaphragmatic pleura
- 3) Enters the thorax by crossing the necks of the first ribs
- 4) Are the only motor nerves to the diaphragm

a) 1, 2, 3 b) 1, 3, 4 c) 1, 2, 4 d) 2, 3

xvii. Regarding the joints of the thorax, the following are synovial joints

- 1) Manubriosternal
- 2) Sternoclavicular
- 3) 2nd to 7th Sternochondral
- 4) Xiphisternal

a) 1, 2, 3 b) 1, 3, 4 c) 1, 2, 4 d) 2, 3

xviii. Failure of differentiation of the individual organs derived from the embryonic foregut would cause malformation of which of the following organs

- 1) Gall bladder
- 2) Oesophagus
- 3) Stomach
- 4) Ascending colon

a) 1, 2, 3 b) 1, 3, 4 c) 1, 2, 4 d) 2, 3

xix. Compression of the common peroneal nerve at the neck of the fibula will affect:

- 1) Eversion
- 2) Dorsiflexion
- 3) Sensations on the dorsum of the foot
- 4) Plantar flexion

a) 1, 2, 3 b) 1, 3, 4 c) 1, 2, 4 d) 2, 3

xx. The thoracic duct returns lymph from

- 1) Left half of the body below the diaphragm
- 2) Right half of the body below the diaphragm
- 3) Left half of the body above the diaphragm
- 4) Right half of the body above the diaphragm

a) 1, 2, 3 b) 1, 3, 4 c) 1, 2, 4 d) 2, 3

Long essays

(2x10=20)

2. A 14-year-old girl was brought to the hospital with complaints of fever, vomiting and acute pain around umbilicus. On examination, the surgeon found that she was having maximum tenderness at Mc Burney's point. From the history and examination, he came to the diagnosis of acute appendicitis. Based on your anatomical knowledge, answer the following questions.

- a) Why is pain felt around umbilicus
- b) Where is Mc Burney's point
- c) What are the various positions of vermiform appendix
- d) Briefly describe the blood supply, development and microscopy of vermiform appendix (1+1+3+5)

3. Describe knee joint under the following headings: Articular surfaces, Capsule and intracapsular structures, Movements and muscles causing each movement

(1+6+3)

Short Essays:

(6x6=36)

4. Describe the features of the interior of the right atrium. Add a note on its development (4+2)
5. Explain the subdivisions, innervation and recesses of pleura (3+1+2)
6. List the sources of development of the thoracoabdominal diaphragm. Enumerate the structures passing through its major openings. (3+3)
7. Describe the gross features and relations of components of extrahepatic biliary apparatus.
8. Briefly describe the internal features of the anal canal.
9. Describe the microanatomy of the kidney. What are the components of the juxtaglomerular apparatus

(4+2)

(6x4=24)

Short Notes:

10. Briefly describe the attachments and innervation of hamstring muscles.
11. Describe the anatomical basis of ischemic heart disease.
12. Describe the site and structures pierced while performing a lumbar puncture
13. Reflect on the following scenarios in the dissection hall: i) Placing anatomy books and dissection instruments on the cadaver ii) Taking pictures of tablemates around the cadaver table and uploading them on social media (2+2)
14. Draw a neat labelled diagram showing contents of superficial perineal pouch in males
15. Clinical importance of venous drainage of lower limb
