

GENESIS

(Post Graduation Medical Orientation Centre)

Foundation-1 Batch

Total Number- 60

Pass Mark-42

Subject: Thorax

Question 16-30 is based on Single answers

Time: 25 Min

Date: 00/00/20

1. True statement regarding Bronchopulmonary segments

- a) One bronchopulmonary segment includes a number of bronchovascular units
- b) Branches of pulmonary artery are segmental in distribution, whereas tributaries of vein are intersegmental
- c) During segmental resection of lung, surgeon should proceed along pulmonary artery
- d) Apical segment of lower lobe is common site for lung infection.
- e) Each segment is independent in vascular supply

F T F T F [BD/ 7th/V-1/P-252]

2. On the Mediastinal surface of the left lung

- a) The left ventricle produces a depression in front of and below the hilum
- b) There is a groove above the hilum for the vena azygos
- c) Oesophageal impression
- d) The main bronchus lies anterior to the pulmonary artery
- e) The thoracic aorta lies behind the hilum

T F T F T [Datta 9th/V-1/P-38/F-2.12]

3. S.A. Node

- a) Situated in the upper & posterior part of right atrium
- b) It is oval in shape and 5 mm in thickness
- c) Supplied by left coronary artery in majority
- d) Composed of specialized excitatory muscle fibres
- e) Transmit impulse to AV node which lies below coronary sinus opening

T F F T F

4. Regarding development of heart

- a) Anterior rough part of Right atrium - right horn of sinus venosus
- b) Smooth part of left ventricle- primitive ventricle
- c) Arch of aorta- related to 4th arch artery
- d) Extrapericardial part of superior venacava- right common cardinal vein
- e) Aortic stenosis is not a part of TOF

T F F T F [BD/ 7th/V-1/P-283]

5. Skeleton & the Heart

- a) Composed of fibrous tissue
- b) Provide attachment to the valves
- c) Facilitate the dilatation of these orifices
- d) Provide attachment to the cardiac muscle fibres
- e) Allows cardiac muscle to contract against the rigid base

T T F T T [Vishram Singh 272(V1)]

6. Regarding blood supply of Heart

- a) Right coronary artery arise from posterior aortic sinus
- b) Right coronary artery is larger than left
- c) SA node is supplied by right coronary artery
- d) AV node is supplied by left coronary artery
- e) Small cardiac vein drain into coronary sinus

F F T F T [Ref:BD /7th/V-1/P-278,281]

7. True statement about breast:

- a) Supported by ligament of Cooper
- b) Lies in superficial fascia
- c) Composed of 15-20 lobes
- d) Peau d'orange is characteristic finding in Phyllodes tumor
- e) Dimpling of skin due to obstruction of subdermal lymphatics

T T T F F [Ref: AK datta/4th/P-32,37/V-3]

8. Oesophagus is constricted when it is related to the

- a) Left brachiocephalic vein
- b) Left subclavian artery
- c) Base of the heart
- d) Arch of the aorta
- e) Left principal bronchus

F F F T T [Ref: AK datta/9th/P-105]

9. A CT scan at the level of the T4/5 vertebral interspace shows

- a) Upper aspect of the arch of aorta
- b) Bifurcation of trachea
- c) Left brachiocephalic vein
- d) Azygos arch
- e) Commencement of the pulmonary artery

F T F T T

10. The functional and clinical anatomy of the diaphragm reveals that

- a) It acts as a muscular constrictor for the oesophagus
- b) It acts as a valve for the inferior vena cava
- c) Sliding hernia of the stomach occurs through its oesophageal opening
- d) It contracts to reduce intra-abdominal pressure for venous returns
- e) Its paradoxical movement in unilateral phrenic nerve palsy results from visceral pressure

T F T F F (Ref: Datta /P-171,172)

11. Cervical rib

- a) Originate from body of 1st thoracic vertebrae
- b) It arises from transverse process of C7
- c) Compresses the upper trunk of brachial plexus
- d) It causes the ischemic neuropathy
- e) Symptoms are less in case of complete rib

F T F T T (Ref: Datta 9th v-1 P- 20)

12. Regarding Trachea

- a) Starts from body of the C6 vertebrae
- b) Developed from Foregut
- c) It is completed fibrous tissue
- d) Recurrent laryngeal nerve lies between trachea and oesophagus
- e) Tracheostomy is done at cricoid cartilage and 1st tracheal ring

TTFTF

13. Regarding blood supply of thoracic wall:

- a) Posterior intercostal artery are 11 in number
- b) All posterior intercostal artery are arise from descending thoracic aorta
- c) There is one anterior intercostal artery in each space
- d) All anterior intercostal artery are direct branch of internal thoracic artery
- e) Intercostal vein lies superior to artery

T F F F T [Ref:BD /7th /V-1/P-228]

14. Regarding the lymphatic drainage of Breast

- a) Lymphatic channel are devoid of valves
- b) Dominant lymphatic drainage is from dermal network
- c) Lymphatic from both breasts drain into thoracic duct
- d) Direction of lymphatic flow within breasts parallels the arterial flow
- e) Nodes beneath the pectoralis minor represent level-II lymph node

TTFFT

15. In CABG vessels are taken

- a) Long saphenous vein
- b) Internal mammary artery
- c) Radial artery
- d) Posterior tibial artery
- e) Left gastroepiploic artery

T T T F F

Each question below contains five suggested answers- choose the one best response to each question (16-30)

16. A patient experiences heart block as a result of occlusion of branches of the anterior inter-ventricular branch of the left coronary artery. Which structure was most likely affected by vascular insult

- a) Cardiac Plexus
- b) Sinoatrial Node
- c) Atrial Node
- d) Bundle of His
- e) Vagal branches

D

17. Which statement about the left ventricle is correct?

- a) The mitral valve is tricuspid.
- b) Its wall has a smooth and a rough portion
- c) Contains two strong papillary muscles
- d) The papillary muscles and chordae tendinae anchor the aortic valve
- e) The aortic valve is bicuspid.

C

18. Which statement regarding the internal thoracic artery is correct?

- a) It is a branch of the aorta
- b) It arises from the brachiocephalic artery on the right side
- c) It lies between the external and internal intercostal muscles
- d) It contributes to the blood supply of the breast.
- e) The pericardiophrenic artery is a terminal branch.

D

19. Which one of the structure passing through the Venacaval opening?

- a) Abdominal aorta
- b) Thoracic duct
- c) Branches from right phrenic nerve
- d) Oesophagus
- e) Anterior and posterior vagal trunk

C

20. Right to left shunt occurs in

- a) Atrial septal defect
- b) Fallot's tetralogy
- c) Patent ductus arteriosus
- d) Eisenmenger's syndrome
- e) Pulmonary stenosis

B

21. Which statement regarding the foetal circulation is correct?

- a) The septum secundum lies to the left of the septum primum
- b) The ductus arteriosus closes at birth.
- c) The foramen ovale is a defect in the septum primum
- d) The ligamentum teres is the embryological remnant of the right umbilical vein.
- e) The umbilical arteries are derived from branches of the external iliac arteries

B

22. A young patient presents with pneumonia . Examination of lateral-view chest film reveals that the pneumonia is localized just inferior to the horizontal fissure. Where would the pneumonia most likely be localized?

- a) Inferior lobe of the left lung
- b) Inferior lobe of the right lung
- c) Middle lobe of the right lung
- d) Middle lobe of the left lung
- e) Superior lobe of the left lung

C

23. During Radical Mastectomy which Muscles are cut?

- a) Rhomboid Major
- b) Pectoralis Major
- c) Intercostal muscle
- d) Latissimus Dorsi
- e) Teres Major

B

24. A patient needs water-seal chest tube drainage. The drain tube to be inserted through which one of the following anatomical landmarks

- a) Anterior to the mid-axillary line in the 7th intercostal space
- b) Above the level of nipple in the mid-axillary line
- c) Below and lateral to the pectoralis major in the mid-axillary line
- d) 5th intercostal Space anterior to the mid-axillary line
- e) Upper border of the 8th rib in the mid-axillary line

D

25. After posterolateral thoracotomy surgeons like to infiltrate local anaesthetic both above and below the incision to block the nerves supplying the thoracic wall. Which one is not correct statement regarding intercostal nerve block?

- a) Intercostal nerve blocks provides excellent anaesthesia for chest trauma patients.
- b) Provide good anesthesia for thoracotomy and also upper abdominal surgical procedures.
- c) Neurovascular bundle situated in between external and internal intercostal muscles
- d) Under USG guidance, the needle is advanced into the region of subcostal groove.
- e) There is risk of pneumothorax

C [Ref: Gray's anatomy P/160]

26. Which of the following structures does not become subdivided by a septum during fetal heart development?

- a) Truncus arteriosus
- b) Primitive atrium
- c) Sinus venosus
- d) Bulbus cordis
- e) Primitive ventricle

C

27. A 42-year-old man is to undergo oesophagectomy. While mobilising the oesophagus in the neck, for anastomosis with the stomach tube on the left side, the operating surgeon must be careful about avoiding injury to which of the following vital structures?

- a) Innominate artery
- b) Innominate vein
- c) Internal carotid artery
- d) Sympathetic chain
- e) Thoracic duct

E

28. A 35 year old man falls and sustains a fracture to the middle third of his clavicle. Which vessel is at greatest risk of injury?

- a) Subclavian vein
- b) Subclavian artery
- c) External carotid artery
- d) Internal carotid artery
- e) Vertebral artery

A

29. In superior venacaval obstruction which vein is responsible for transmitting the blood from the upper half of the body-

- a) Right brachiocephalic vein
- b) Left brachiocephalic vein
- c) Azygos vein
- d) Hemiazygos vein
- e) Subclavian vein

C [Ref:Datta /9th /V-1/P-99]

30. Following axillary dissection a patient is unable to climb by pulling the trunk upwards and forwards. Which one of the following nerves is inadvertently injured during the operation?

- a) Axillary nerve
- b) Intercosto- brachial nerve
- c) Long thoracic nerve
- d) Thoraco-dorsal nerve
- e) Upper subscapular nerve

D [Gray's anatomy P/141]