

BOWEN UNIVERSITY, IWO.
COLLEGE OF HEALTH SCIENCES,
Faculty Of Basic Medical Sciences
Department Of Anatomy
2020/2021 Academic Session
Thorax Anatomy 2nd Incourse

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
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
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
4. The shape of the thoracic vertebra body is
 - A. Oval
 - B. Heart
 - C. ellipsis
 - D. oblong
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
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
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
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
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
10. The right crus of the diaphragm is attached which vertebrae levels?
 - A. L1-L2
 - B. L1-L3
 - C. L1-L4

- D. L1-L5
11. Pleural reflection lies at which rib level in the midaxillary line?
 - A. 6th
 - B. 8th
 - C. 10th
 - D. 12th
 12. The vena caval opening foramen in the diaphragm lies at the level of
 - A. T12
 - B. T8
 - C. T10
 - D. L1
 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
 14. Which of the following are innervated by dorsal rami?
 - A. levatores costarum
 - B. external intercostals
 - C. internal intercostals
 - D. serratus posterior inferior
 15. Sternal foramen is a defect of the
 - A. Manubrium sterni
 - B. Corpus sterni
 - C. Xiphoid sterni
 - D. Xiphoid process
 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
 17. Parietal layer lines the following pleural cavity except
 - A. Costal pleura
 - B. Mediastinal pleura
 - C. Diaphragmatic pleura
 - D. Pericardial pleura
 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
 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
 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.
 21. The 11th and 12th ribs are
 - A. Vertebrosteral ribs
 - B. Vertebrochondral ribs

- C. Vertebral ribs
- D. No ribs
22. All the following statements are true of the left lung except
- It is divided into upper and lower lobes by an oblique fissure
 - It contains no lingula
 - It contains a cardiac notch
 - It receives 2 bronchial arteries.
23. The following are correct fact on thymus except
- It is a bilobed structure in the superior mediastinum
 - It has immune system in early life
 - Behind it is the arch of the aorta with its three large branches
 - It is a lifetime immune system.
24. The pleural cavity contains which of the following?
- Bronchi
 - Serous pleural fluid
 - Lymph nodes
 - Pulmonary arteries and veins
25. The musculophrenic arteries give rise to which of the following?
- anterior intercostal arteries for intercostal spaces 7–9
 - posterior intercostals arteries for intercostal spaces 3–11
 - subcostal artery
 - inferior phrenic artery
26. Regarding surface markings of the lungs the following is true
- Oblique fissure follows approximately the axis of 6th rib
 - The two pleura diverge away at 6th costal cartilage level behind sternum
 - Transverse fissure of right lung is at 6th costal cartilage level
 - Oblique fissure following medial border of scapula on abducted arm
27. Which heart valve has two cusps?
- Aortic
 - Mitral
 - Pulmonary
 - Pulmonary and aortic
28. Which of the following statement is false about Pleura recesses?
- The costodiaphragmatic recesses are the regions between the inferior margin of the lungs and inferior margin of the pleural cavities.
 - The costodiaphragmatic recesses are deepest after forced expiration and shallowest after forced inspiration.
 - The costomediastinal recess is largest is on the right side in the region overlying the heart
 - The costomediastinal recess occurs on each side where costal pleura is opposed to mediastinal pleura
29. All of the following statements correctly apply to the right lung EXCEPT
- The superior and oblique fissures divide it into three lobes.
 - It is larger and heavier than the left lung.
 - It is shorter and wider than the left lung.
 - It contains a thin, tongue-like process called the lingula.
30. The parietal pleura consists of all of the following parts EXCEPT
- Costal
 - Pericardial
 - Mediastinal
 - Cervical
31. The most superior structure at the root of the left lung is
- Pulmonary artery
 - Pulmonary vein

- C. Left main bronchus
D. Bronchial arteries
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
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
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
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
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
37. Which of the following structures is located in the middle mediastinum?
A. Thoracic duct
B. Lungs
C. Heart
D. Azygos vein
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.
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
40. The interventricular septum contains which of the following structures?
A. Anterior papillary muscle
B. Sinus venarum
C. Sinoatrial node
D. Conus arteriosus
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
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
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
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
45. The septomarginal trabecula (moderator band) is associated with the:
- A. Right Atrium
 - B. Right Ventricle
 - C. Left Atrium
 - D. Left Ventricle
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
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
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.
49. All of the following veins drain into the coronary sinus EXCEPT
- A. Anterior cardiac
 - B. Small cardiac
 - C. Middle cardiac
 - D. Great cardiac
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.
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.
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

53. Which of the following is not true of the surface markings of the left pleura?
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 - 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
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
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
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
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
58. Phrenic nerve supplies the sensation to all but
- A. Diaphragm
 - B. Mediastinal pleura
 - C. Peritoneum
 - D. Left ventricle
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
60. What lies posterior to the right root of lung
- A. Aorta
 - B. Right phrenic nerve
 - C. Right vagus nerve
 - D. Arch of aorta
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.
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.
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.
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
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
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
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.
68. The aortic arch crosses these structures as a unit except
- A. Thoracic duct
- B. Trachea
- C. Bronchi
- D. Esophagus
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
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
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
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
73. Which passes through the diaphragm with the oesophagus?
A. Azygos vein
B. Right vagus
C. Sympathetic trunks
D. Thoracic duct
74. Which muscle is NOT used in forced expiration?
A. Transverses abdominis
B. Rectus abdominis
C. Diaphragm
D. External oblique
75. Which vessel passes directly behind the right hilum?
A. Right phrenic nerve
B. Right vagus nerve
C. Azygos vein
D. Internal mammary artery
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
ins from the upper third of the oesophagus
77. The major arterial supply to the interventricular septum originates from the
A. Circumflex artery
B. Marginal artery
C. Posterior descending
D. Anterior descending
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
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
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 ve