

1. ANSWERS TO PRACTICAL ANATOMY MARATHON SENT ON 10TH JUNE 2017

(a) Right side

(b) Horizontal fissure

2. (a) Arch of azygos vein (because this is the right lung)

(b) A section of a lung aerated by tertiary bronchi with its arterial supply. A bronchopulmonary segment is a portion of lung supplied by a specific tertiary bronchus (also called a segmental bronchus) and arteries. These arteries branch from the pulmonary and bronchial arteries, and run together through the center of the segment. There are 10 bronchopulmonary segments in the right lung: three in the superior lobe, two in the middle lobe, and five in the inferior lobe.

3. (a) Phrenic nerve (RT)

nb it is anterior to hilum - Supplies the mediastinal and diaphragmatic segments of parietal pleura, fibrous & parietal pericardium, diaphragm and biliary apparatus.

(b) Vessels: 1. Anterior intercostal 2. Posterior intercostal vessels  
Nerves: Intercostal nerves.

Muscles: external intercostal, Internal Intercostal muscles

4. (a) A. Left coronary artery B. Coronary sinus
- (b) left atrial branch to the left atrium, left conal to the infundibulum, left marginal, left circumflex, diagonal, anterior interventricular artery
5. (a) A. Smooth right atrium (sinus venarum) - identify fossa ovalis and limbus of fossa ovalis B. Rough right atrium evidenced by Musculi pectinati
- (b) Ridges, Bridges, Papillary muscles, chordae tendinae
6. (a) A Superior Venacava B. Left Vagus nerve (NB: it is branching to give Left recurrent laryngeal Nerve)
- (b) Heart
- Arteries: Ascending aorta, pumonary trunk, two pulmonary arteries,
- Veins: Superior vena cava, Azygos vein, Pulmonary veins
- Nerves: phrenic, deep cardiac,
- Lymph nodes: Tracheobronchial nodes
- Tubes: Bifurcation of trachea, Right and left principal bronchi
7. (a) A.Right Phrenic nerve B. Brachiocephalic trunk (artery)
- (b) A. Paralysis of diaphragm leading to difficulty in breathing.  
Kherr sign in Gall bladder inflammation.
- B. Atherosclerosis
- Subclavian artery steal syndrome.
8. (a) A. Right thoracic Sympathetic chain. Branches (Greater splanchnic 5 -9, Lesser Splanchnic 10 -11 and lowest splanchnic 12
- (b) thoracic duct (terminates of junction Left internal jugular and left subclavian Vein)  
- left venous angle

9. (a) Horner's syndrome which is a lesion of sympathetic chain. - partial ptosis - drooping of the upper eyelid due to denervation of tarsal muscles of muller, myosis-unopossed constriction of the pupil due to denervation of dilator pupillae muscle, anhydrosis - reduced sweating due to lack of sympathetic innervation to sweat glands, Enophthalmos- sinking/ retraction of the eyeball due to denervation of smooth muscle orbitalis

(b) Neural crest cells

10. (a) A is internal thoracic artery. Terminal branches are Superior Epigastric artery and Muscolophrenic artery

(b) Fibrous

Serous (parietal and visceral)

11. **A pyramidalis**

B. Rectus Abdominis

C. Rectus sheath.

(b) Tense rectus sheath and reinforces linea alba

(c) Diastasis Recti, prune Belly syndrome

12. (a) A. External Oblique

B. Internal Oblique

(b) forced expiratory activity

Support of abdominal viscera

Expulsive acts

Flexion of trunk by rectus abdominis

Lateral flexion of the trunk by oblique muscles

Rotation of trunk.

13. (a) Stomach functions:

Churning of food (mechanical digestion)

Chemical digestion of proteins

Immune protective (innate immunity) Gastric acid

Storage of food.

Secretion of Intrinsic factor for vitamin B12 absorption.

(b) - left gastroepiploic from splenic artery

14. (a) splenic artery: Short gastric, Pancreatic, left gastroepiploic artery, Arterial magna pancreaticus

(b) Second part of duodenum at ampulla of Vater (pancreas)

15. (a) A. Stomach(gastric) B. Left flexure of colon.

(b) Overwhelming postsplenectomy infection

Thrombocytosis

Red cell with Howell Jolly bodies

16. (a) Cystic Artery, cystic vein functions: Storage of bile, contracting to  
Concentration of bile, and release bile to duodenum.

(b) obliterated right umbilical Vein

17. A. Hepatic Artery B. Common Bile duct C. Inferior Vena cava

18. (a) A. Caudate Lobe B. Falciform Ligament

(b) Falciform ligament Coronary ligaments Lesser omentum  
hepatoduodenal ligament

19. A. Cystic notch B. Tuberosity C. quadrate lobe D. Gastric impression

20. The vessel is superior mesenteric artery and its branches are ileocolic right colic  
middle colic inferior pancreaticoduodenal

Jejunal and ileal branches

21. Duodenum

Superior pancreaticoduodenal

Left gastroepiploic

Inferior Pancreaticoduodenal

Right gastric

22.

23.

24. A. retrocecal, retrocolic other locations include pre-ileal, retroileal, retrocecal, subcecal,  
Acute abdomen secondary to acute appendicitis

25. Colon/large intestines

Reasons: Presence of Taenia Coli, Haustrations and Appendiculae Epiploicae

A. Middle colic origin: superior mesenteric

26. (a) Tributaries: Left gonadal vein left adrenal vein  
Left inferior phrenic Left second lumbar

(b) Adrenal medulla: Neural crest cells

Adrenal cortex: Intermediate mesoderm

27. (a) A. duodenum (D2) B. hepatic flexure of colon

(b) abdominal Pelvic

Intravesical/ intramural

28. (a) Right Crus of diaphragm

(b) Aortic opening of diaphragm - Thoracic Duct      Aorta,  
Azygos Vein

29.

30. Greater omentum

Blood supply: Right, middle and left omental arteries from gastroepiloric arteries

31. External anal sphincter parts (Subcutaneous, superficial and Deep)

32.

33. A. tunica Albuginea B. corpora Carvenosa D. Intercarvenous septum of bucks fascia

B. Penile / spongy Urethra

34. (a) A. Uterus      B. Rectum      C. Urinary Bladder

(b) Arterial: Superior, middle and inferior rectal arteries

Venous: Superior, middle and inferior rectal veins

Has portosystemic communication which can dilate in portal hypertension

The veins cushions can develop hemorrhoids

35. Internal Iliac artery

36. A. Ureter                      B. Sacrum (s1)

Upper:                      Renal Aorta and gonadal Artery

Middle:                      Common Iliac and gonadal arteries

Lower:                      Uterine and Superior Vesical arteries

37. (a) Prostate

(b) Hesitancy, Frequency, Nocturia etc

WITH REGARDS,

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