

Applied Basic Anatomy and Physiology

- 1. The false capsule of the thyroid gland is formed by which anatomical structure?**
 - Deep cervical fascia
 - Pretracheal fascia
 - Prevertebral fascia
 - General investing layer
- 2. The recurrent laryngeal nerve is closely related to which of the following vessel?**
 - Superior thyroid artery
 - Middle thyroid vein
 - Inferior thyroid artery
 - Inferior thyroid vein
- 3. The recurrent laryngeal nerve is a branch of which nerve?**
 - Phrenic nerve
 - Vagus nerve
 - External laryngeal nerve
 - Internal laryngeal nerve
- 4. The lymphatics of the thyroid gland initially drain into which group of nodes?**
 - Deep cervical nodes
 - Pretracheal and paratracheal lymph nodes
 - Posterior triangle lymph nodes
 - Supraclavicular lymph nodes
- 5. The thyroxin production is controlled by Thyroid-stimulating Hormone which is produced by which gland?**
 - Thyroid gland
 - Parathyroid glands
 - Anterior pituitary
 - Posterior pituitary

6. Which of the following nerves is closely related to the parotid gland?

- A. Vagus nerve
- B. Phrenic nerve
- C. Facial nerve
- D. Glossopharyngeal nerve

7. The internal mammary lymph nodes drain which of the following structure?

- A. Medial half of breast
- B. Lateral half of breast
- C. Mediastinum
- D. Lungs

8. The chief cells of the gastric glands secret which substance?

- A. Hydrochloric acid
- B. Pepsinogen
- C. Gastrin
- D. Histamine

9. The acid in the gastric juice is secreted by which cells?

- A. Chief cells
- B. Parietal cells
- C. 'G' cells
- D. Goblet cells

10. The hormone secreted by the 'G' cells of the gastric mucosa is called

- A. Histamine
- B. Gastrin
- C. Pentagastrin
- D. Secretin

11. All of the following are the structures seen at the porta hepatis except

- A. Portal vein
- B. Common hepatic duct
- C. Hepatic artery
- D. Hepatic veins

12. About 80% of the blood supply to the liver is derived from which vessel?

- A. Hepatic artery
- B. Hepatic vein
- C. Portal vein
- D. Celiac axis

13. The inferior mesenteric vein joins which vein?

- A. Superior mesenteric vein
- B. Portal vein
- C. Inferior vena cava
- D. Splenic vein

14. The cystic artery most commonly arises from which artery?

- A. Left hepatic artery
- B. Right hepatic artery
- C. Common hepatic artery
- D. Gastroduodenal artery

15. The cystic duct most commonly joins which duct?

- A. Right hepatic duct
- B. Left hepatic duct
- C. Common hepatic duct
- D. Common bile duct

16. The common bile duct opens at the ampula of Vater situated at the

- A. Medial wall of second part of duodenum
- B. Lateral wall of second part of duodenum
- C. Medial wall of third part of duodenum
- D. Medial wall of first part of duodenum

17. The spleen is supplied by splenic artery that is a branch of which artery?

- A. Inferior mesenteric artery
- B. Hepatic artery
- C. Celiac axis
- D. Left gastric artery

18. The splenic vein joins which of the following veins?

- A. Superior mesenteric vein
- B. Left renal vein
- C. Inferior vena cava
- D. Left gastric vein

19. The short gastric arteries of the stomach are found in which structure?

- A. Lesser omentum
- B. Gastrosplenic ligament
- C. Greater omentum
- D. Gastrohepatic ligament

20. The portion of the peritoneal cavity behind the stomach is called

- A. Greater peritoneal cavity
- B. Retroperitoneal cavity
- C. Lesser peritoneal cavity
- D. Rutherford–Morrisons pouch

21. Which ligament marks the anatomical junction between duodenum and jejunum?

- A. Ligamentum teres
- B. Ligament of Treitz
- C. Falciform ligament
- D. Gastro-duodenal ligament

22. The venous drainage of the liver is by which vein?

- A. Portal veins
- B. Hepatic veins
- C. Inferior vena cava
- D. Vena azygos

23. The appendix is supplied by the appendicular artery which is a branch of

- A. Ileo-colic artery
- B. Inferior mesenteric artery
- C. Right external iliac artery
- D. Right common iliac artery

24. The Meckel's diverticulum is a remnant of which embryonic structure?

- A. Vitellointestinal duct
- B. Patent urachus
- C. Mesonephric duct
- D. Wolffian body

25. The pouch of Douglas in the female lies between which anatomical structure?

- A. Bladder and uterus
- B. Bladder and rectum
- C. Uterus and bladder
- D. Uterus and rectum

26. The lower esophageal sphincter is made of

- A. Cricopharyngeus muscle
- B. Right crus of diaphragm
- C. Left crus of diaphragm
- D. None of the above

27. What is the length of esophagus from the upper sphincter?

- A. 10 cm
- B. 20 cm
- C. 25 cm
- D. 30 cm

28. The distance from the incisor teeth to cardioesophageal junction is

- A. 25 cm
- B. 30 cm
- C. 35 cm
- D. 40 cm

29. Most of the blood from the esophagus drain through the

- A. Left gastric vein
- B. Coronary vein
- C. Azygos vein
- D. Inferior vena cava

30. Which epithelium lines the middle third of esophagus ?

- A. Columnar epithelium
- B. Keratinised stratified squamous epithelium
- C. Transitional epithelium
- D. Nonkeratinised nonstratified squamous epithelium

31. The venous drainage of the right testis is into the

- A. Inferior vena cava
- B. Right renal vein
- C. Right common iliac vein
- D. Right external iliac vein

32. The venous drainage of the left testis is into the

- A. Right renal vein
- B. Left renal vein
- C. Left iliac vein
- D. Splenic vein

33. The cervical rib arises from which vertebra?

- A. First cervical vertebra
- B. First thoracic vertebra
- C. Seventh cervical vertebra
- D. Sixth cervical vertebra

34. Which is the strongest layer of the scalp?

- A. Skin
- B. Cutaneous tissue
- C. Epicranial aponeurosis
- D. Pericranium

35. All of the following are boundaries of femoral ring except

- A. Inguinal ligament
- B. Lacunar ligament
- C. Obturator ligament
- D. Ileopectineal ligament

36. The female inguinal canal does not contain any of the following except

- A. Vas deferens
- B. Artery to the testes
- C. Round ligament
- D. Broad ligament

37. Which is the only structure of the gastrointestinal tract that lacks the serosal coat?

- A. Esophagus
- B. Duodenum
- C. Jejunum
- D. Ileum

38. The lateral boundary of Hasselbach's triangle is made of which structure?

- A. Superficial epigastric artery
- B. Inferior epigastric artery
- C. Lateral border of rectus
- D. Inferior hypogastric artery

39. Which is the widest and most dependent part of male urethra?

- A. Membranous urethra
- B. Bulbar urethra
- C. Prostatic urethra
- D. Penile urethra

40. The penile urethra passes through which structure?

- A. Corpus callosum
- B. Corpus cavernosum
- C. Corpus spongiosum
- D. Corpus membranous

41. All of the following are intraperitoneal subphrenic spaces except

- A. Right superior
- B. Right posterior
- C. Bare area of liver
- D. Left superior

42. Weakness of which one of the following muscles is responsible for direct inguinal hernia in elderly men?

- A. External oblique muscle
- B. Internal oblique muscle
- C. Transversus abdominis
- D. Rectus abdominis

43. All of the following form the coverings of the testes except

- A. Skin
- B. External spermatic fascia
- C. Internal spermatic fascia
- D. Transversalis fascia

44. The superior thyroid artery is a branch of which artery?

- A. External carotid artery
- B. Internal carotid artery
- C. Common carotid artery
- D. Thyrocervical trunk

45. The inferior thyroid artery is a branch of which artery?

- A. External carotid artery
- B. Internal carotid artery
- C. Subclavian artery
- D. Thyrocervical trunk

46. The gastroduodenal junction is identified by which anatomical landmark?

- A. Gastroduodenal artery
- B. Left gastric artery
- C. Ligament of Treitz
- D. Veins of Mayo

47. The membranous urethra passes through which structure?

- A. Urogenital diaphragm
- B. Pelvic diaphragm
- C. Levator ani
- D. Puborectalis sling

48. The motor nerve fibers to the stomach passes through which structure?

- A. Coeliac ganglion
- B. Splanchnic nerves
- C. Vagus nerve
- D. Phrenic nerve

49. The pancreas is what type of gland?

- A. Modified sweat gland
- B. Exocrine gland
- C. Endocrine gland
- D. Exocrine and endocrine glands

50. The Inguinal lymph nodes drain the following areas except

- A. The scrotum
- B. The penis
- C. The testes
- D. The perineum

51. The testes drains into which one of the following lymph nodes

- A. Inguinal lymph nodes
- B. Femoral lymph nodes
- C. External iliac lymph nodes
- D. Para-aortic lymph nodes

52. The artery felt on the lateral side of extensor hallucis longus tendon is called

- A. Dorsalis paedis artery
- B. Post tibial artery
- C. Anterior tibial artery
- D. Lateral popliteal artery

53. The layers of the scrotal wall are the following except

- A. Skin
- B. External spermatic fascia
- C. Cremasteric muscle
- D. Internal spermatic fascia

54. The upper esophageal sphincter is a part of

- A. Superior pharyngeal constrictor
- B. Middle pharyngeal constrictor
- C. Upper inferior pharyngeal constrictor
- D. Cricopharyngeal part of the inferior pharyngeal constrictor

55. Which is the strongest layer of the esophagus?

- A. Serosa
- B. Outer longitudinal muscle
- C. Inner circular muscle
- D. Mucosa

56. Which artery supplies the fundus of the stomach?

- A. Left gastric
- B. Right gastric
- C. Short gastric
- D. Left gastroepiploic

57. The hormones secreted by adrenal cortex include the following except

- A. Adrenocorticotrophic hormone
- B. Hydrocortisone
- C. Androgenic hormone
- D. Oestrogenic hormone

58. The left adrenal vein drains into which vein?

- A. Inferior vena cava
- B. Renal vein
- C. Portal vein
- D. Hepatic vein

59. How does the terminal part of the common bile duct most often lie in relation to the head of pancreas?

- A. Anterior to it
- B. Posterior to it
- C. Medial to it
- D. Buried within its substance

60. The roof of ischiorectal fossa is formed by which muscle?

- A. Levator ani muscle
- B. Deep transverse perineal muscle
- C. External anal sphincter
- D. Obturator internus muscle

61. Which one of the following is not a strap muscle in the neck?

- A. Sternohyoid
- B. Sternomastoid
- C. Omohyoid
- D. Sternothyroid

62. Which one of the following is NOT a content of carotid sheath?

- A. Common carotid artery
- B. Internal carotid artery
- C. External carotid artery
- D. Vagus nerve

63. The internal sphincter of the rectum is part of which muscle?

- A. Circular muscle coat of rectum
- B. Longitudinal muscle coat of rectum
- C. Levator ani muscle
- D. Puborectal sling

64. Anal continence is maintained by all of the following except

- A. Internal sphincter
- B. Ano-rectal sensation
- C. Ano-rectal reflexes
- D. Pudendal nerve

65. What are the attachments of round ligament?

- A. Uterine cervix to labia majora
- B. Fundus of uterus to labia minora
- C. Uterine horn to labia majora
- D. Uterine horn to labia minora

66. The canal of Nuck in the female is analogous to

- A. Tunica vaginalis
- B. Transversalis fascia
- C. Cremasteric fascia
- D. Processes vaginalis

67. In which organ the tubercle of Zukerkandl is found?

- A. Spleen
- B. Liver
- C. Breast
- D. Thyroid

68. What is linea Semicircularis?

- A. Lower limit of anterior rectus sheath below the umbilicus
- B. Lower limit of posterior rectus sheath above the umbilicus
- C. Lower limit of anterior rectus sheath above the umbilicus
- D. Lower limit of posterior rectus sheath below the umbilicus

69. The circle of Willis is formed by the following arteries except

- A. Left and right internal carotid arteries
- B. Left and right anterior cerebral arteries
- C. Left and right posterior cerebral arteries
- D. Left and right middle cerebral arteries

70. Cauda equina is found between which of the following vertebral levels?

- A. T12 and L1
- B. L2 and S2
- C. L1 and L5
- D. T12 and L3

71. The ophthalmic artery is a branch of which artery?

- A. External carotid artery
- B. Internal carotid artery
- C. Anterior cerebral artery
- D. Middle cerebral artery

72. All of the following are paired sinuses in the brain, except

- A. Superior sagittal sinus
- B. Inferior sagittal sinus
- C. Basilar sinus
- D. Transverse sinus

73. Which of the following muscles is NOT attached to the clavicle?

- A. Trapezius
- B. Deltoid
- C. Pectoralis major
- D. Pectoralis minor

74. Tendon of which muscle passes through the shoulder joint?

- A. Supraspinatus
- B. Infraspinatus
- C. Long head of triceps
- D. Long head of biceps

ANSWERS TO APPLIED BASIC ANATOMY AND PHYSIOLOGY

1. Pretracheal fascia
2. Inferior thyroid artery
3. Vagus nerve
4. Pretracheal and paratracheal lymph nodes
5. Anterior pituitary
6. Fascial nerve
7. Medial half of breast
8. Pepsinogen
9. Parietal cells
10. Gastrin
11. Hepatic veins
12. Portal vein
13. Splenic vein
14. Right hepatic artery
15. Common hepatic duct
16. Medial wall of second part of duodenum
17. Celiac axis
18. Superior mesenteric vein
19. Gastroplenic ligament
20. Lesser peritoneal cavity
21. Ligament of Treitz
22. Hepatic veins
23. Ileo-colic artery
24. Vitellointestinal duct
25. Uterus and rectum
26. None of the above
27. 25 cm
28. 40 cm
29. Azygos vein
30. Nonkeratinised nonstratified squamous epithelium
31. Inferior vena cava
32. Left renal vein
33. Seventh cervical vertebra
34. Epicranial aponeurosis
35. Obturator ligament
36. Round ligament
37. Esophagus
38. Inferior epigastric artery
39. Bulbar urethra
40. Corpus spongiosum
41. Bare area of liver
42. Internal oblique muscle
43. Transversalis fascia
44. External carotid artery
45. Throcervical trunk
46. Veins of Mayo
47. Urogenital diaphragm
48. Vagus nerve
49. Exocrine and endocrine gland
50. The testes
51. Para-aortic lymph nodes
52. Dorsalis paedis artery
53. Cremasteric muscle
54. Cricopharyngeal part of the inferior pharyngeal constrictor
55. Mucosa
56. Short gastric
57. Adrenocorticotrophic hormone
58. Renal vein
59. Buried within its substance
60. Levator ani muscle
61. Sternomastoid
62. External carotid artery
63. Longitudinal muscle coat of rectum
64. Internal sphincter
65. Uterine horn to labia majora
66. Processes vaginalis
67. Thyroid
68. Lower limit of posterior rectus sheath below the umbilicus
69. Left and right middle cerebral arteries
70. L2 and S2
71. Internal carotid artery
72. Transverse sinus
73. Pectoralis minor
74. Long head of biceps