

**KMCT COLLEGE OF ALLIED HEALTH SCIENCES
MUKKOM, KOZHIKODE, KERALA.
DEPARTMENT OF PHYSIOTHERAPY.
FIRST YEAR BPT**

ANATOMY- QUESTION BANK

ESSAY:-

1. Describe the radioulnar joints in detail and add a note on its applied anatomy.
2. Describe the carotid triangle in detail. Add a note on its applied anatomy
3. Explain the major categories and functions of bones in the human body, providing examples for each category.
4. Compare and contrast the different classifications of joints, including structural and functional classifications, giving examples for each.
5. Describe the structure and function of synovial joints, and provide examples of commonly found synovial joints in the body.
6. Discuss the anatomical location and significance of the axilla (armpit) in relation to the surrounding structures.
7. How does the brachial plexus contribute to the innervation of the upper limb, and what are its main components?
8. Analyze the anatomy and mechanics of the shoulder joint, highlighting its range of motion and important supporting structures.
9. Explore the anatomy of the cubital fossa, including its boundaries and the key structures passing through it.
10. Explain the structure and function of the elbow joint, detailing the bones involved and the movements it allows.
11. Describe the course and functions of the median nerve in the upper limb, as well as its clinical significance.

12. Elaborate on the anatomical course and functions of the ulnar nerve in the forearm and hand.
13. Discuss the anatomy and functions of the radial nerve, particularly in relation to the muscles it innervates and its role in hand and wrist movements.
14. Explore the anatomy and significance of the diaphragm in the respiratory system, including its role in breathing.
15. Explain the structure and function of the lungs, highlighting their role in the respiratory system.
16. Define bronchopulmonary segments and their importance in lung anatomy and surgery.
17. Discuss the mediastinum's location within the thoracic cavity and the structures it contains, emphasizing its role in organizing chest anatomy.
18. Analyze the anatomy of the heart, including its chambers, valves, and major blood vessels connected to it.
19. Explain the intricate network of blood vessels that supply the heart with oxygen and nutrients.
20. Detail the intrinsic muscles of the hand, their functions, and how they contribute to hand movements.
21. Describe the course and functions of the musculocutaneous nerve in the upper limb, emphasizing its role in arm flexion and sensation.
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77. Detail the intrinsic muscles of the hand, their functions, and how they contribute to hand movements.
78. Describe the course and functions of the musculocutaneous nerve in the upper limb, emphasizing its role in arm flexion and sensation.

Short essay questions:-

1. Discuss the anatomical features and clinical significance of the adductor canal in the thigh, emphasizing its contents and role in lower limb circulation and innervation.
2. Explain the structure and functions of the ankle joint, focusing on its components, movements, and common injuries that affect this joint.
3. Explore the anatomy and functions of the gluteal muscles, including the gluteus maximus, medius, and minimus, and their roles in hip stability and locomotion.
4. Describe the hamstring muscle group, highlighting its individual muscles, attachments, and actions in the thigh and lower limb. How are hamstring injuries typically managed?
5. Discuss the muscles of the anterior abdominal wall, their names, and functions in maintaining abdominal integrity and supporting various physiological processes.
6. Analyze the anatomy of the stomach, including its regions, mucosal lining, and role in digestion. What are the main functions and common disorders associated with the stomach?
7. Explain the structure and functions of the liver, emphasizing its role in metabolism, detoxification, and bile production, and its significance for overall health.
8. Describe the anatomy of the kidney, including its internal structures and functions in filtering blood, maintaining fluid balance, and excreting metabolic waste products.
9. Discuss the anatomy of the uterus in the female reproductive system, covering its structure, layers, and role in pregnancy. How does the uterus adapt during different stages of a woman's life?
10. Explore the anatomy of the testis in the male reproductive system, detailing its structure, function in sperm production, and hormonal regulation. How does the testis contribute to male fertility?
11. Analyze the quadriceps femoris muscle group, its components, and actions in the thigh and lower limb. How do these muscles impact daily activities and athletic performance?
12. Explain the course and functions of the median nerve in the upper limb, including its role in hand and finger movements and common conditions affecting it.

13. Elaborate on the anatomy and functions of the ulnar nerve, including its distribution and its importance in hand and wrist function. What are typical symptoms of ulnar nerve compression or injury?
14. Discuss the structures and mechanisms that provide support to the uterus within the female pelvis. How does this support system impact reproductive health and pregnancy outcomes?
15. Discuss the anatomy and functions of the femoral nerve, its course, and its role in innervating structures of the thigh and lower limb. What are the clinical implications of femoral nerve injuries?
16. Explain the anatomy of the femoral artery, including its origin, branches, and the regions it supplies with blood. How does the femoral artery contribute to the vascular supply of the lower limb?
17. Describe the great saphenous vein, its course, and its role in venous circulation in the lower limb. What are the common medical procedures involving this vein?
18. Explore the anatomy and functions of the profunda femoral artery, highlighting its branches and its contribution to the arterial supply of the thigh.
19. Analyze the anatomy and actions of the sartorius muscle, including its unique role in thigh and hip movement. How is it used in clinical evaluations of lower limb function?
20. Discuss the contents and functions of the adductor canal in the thigh, emphasizing its role in housing vital structures and facilitating blood and nerve supply.
21. Explain the anatomy of the adductor compartment in the thigh, covering its muscles and their actions. How do these muscles contribute to lower limb movement and stability?
22. Elaborate on the course and functions of the obturator nerve, including its innervation of the adductor muscles and its role in hip and thigh movements.
23. Define and describe the condition of "foot drop." What are its causes, symptoms, and potential treatment options?

24. Explore the anatomy and functions of the iliofemoral ligament in the hip joint, emphasizing its role in joint stability and mobility.
25. Discuss the structure and significance of the ligamentum patellae (patellar ligament) in the knee joint, including its attachment points and role in knee extension.
26. Describe the anatomy of the femur, focusing on its upper end. What are the key features and articulations of the femur in relation to the hip joint?
27. Explain the structure and functions of the patella (kneecap), including its role in protecting the knee joint and aiding in knee extension.
28. Analyze the linea aspera on the femur, its location, and its importance as a muscle attachment site in the thigh.
29. Discuss the anatomy and functions of the common peroneal nerve (common fibular nerve) in the leg, including its course and potential clinical issues.
30. Explore the anatomy of the popliteal artery, its branches, and its role in supplying blood to the knee joint and surrounding structures.
31. Describe the popliteal muscles, their location, and their functions in relation to the knee joint and leg movement.
32. Discuss the anatomy of the hamstring muscle group, its components, and actions in the thigh and lower limb. How do these muscles contribute to athletic performance and daily activities?
33. Explain the structure and functions of the tibia, particularly its upper end. How does the tibia contribute to leg stability and weight-bearing?
34. Explore the anatomy and functions of the meniscus in the knee joint, including its role in joint lubrication and shock absorption.
35. Discuss the cruciate ligaments in the knee joint, detailing their names, functions, and importance in maintaining joint stability.
36. Analyze the tibialis anterior muscle, its origin, insertion, and actions in the leg and foot. How does this muscle contribute to dorsiflexion and foot control?

37. Explain the anatomy and functions of the gastrocnemius and soleus muscles in the calf, including their roles in plantarflexion and stability during walking and running.
38. Describe the Achilles tendon (tendocalcaneus), its location, and its significance in connecting the calf muscles to the heel bone. How does it impact movement and foot function?
39. Discuss the sustentaculum tali in the foot, its location, and its role in supporting the talus bone. How does it contribute to the foot's arches and stability?
40. Explain the anatomy and functions of the deltoid ligament in the ankle, its attachments, and its role in stabilizing the medial side of the ankle joint.
41. Explore the spring ligament (calcaneonavicular ligament) in the foot, its structure, and its role in maintaining the arches of the foot and supporting the talus.
42. Define Pott's fracture and describe its typical causes, symptoms, and treatment approaches in relation to ankle injuries.
43. Discuss the different arches of the foot, including the medial longitudinal arch, lateral longitudinal arch, and transverse arch, and their functions in weight distribution and shock absorption.
44. Explain the role and anatomy of the plantar aponeurosis (plantar fascia) in the foot, including its attachment points and its importance in maintaining the foot's arches.
45. Describe the condition known as "Saturday night palsy," including its causes, symptoms, and potential complications related to nerve compression.
46. Discuss "crutch palsy," detailing the condition, its causes, and the areas of the body it affects in individuals who rely on crutches for mobility.
47. Explain the concept of "ape thumb deformity" in relation to hand anatomy and evolution. What are the anatomical features associated with this condition?
48. Discuss the phenomenon of "sleeping foot," describing its causes, symptoms, and strategies to alleviate the discomfort and tingling associated with it.
49. Explore the anatomy and functions of the femoral canal, emphasizing its location, contents, and clinical relevance in hernia formation.

50. Define the ischial tuberosity, its location, and its role as an attachment site for muscles and ligaments in the pelvic region.
51. Explain the anatomical features and functions of the piriformis muscle, its relationship to the sciatic nerve, and its role in hip rotation and stability.
52. Describe the anatomy of the gluteus maximus muscle, including its origin, insertion, and actions, as well as its significance in activities such as walking and running.
53. Discuss the rectus sheath, its components, and its role in protecting and supporting the rectus abdominis muscles in the abdominal wall.
54. Explore the arterial anastomoses around the knee joint, detailing the interconnected blood vessels that provide collateral circulation to this region.
55. Analyze the different parts of the stomach, including the cardia, fundus, body, and pylorus, and their respective functions in the digestive process.
56. Describe the blood supply of the stomach, including the main arteries and veins that nourish and drain this organ.
57. Discuss the concept of the "stomach bed," explaining the anatomical structures and relationships around the stomach within the abdominal cavity.
58. Explain the different parts of the duodenum, highlighting the duodenal cap, descending, horizontal, and ascending parts, and their functions in digestion and absorption.
59. Describe the lobes of the liver, including the right, left, caudate, and quadrate lobes, and their roles in liver function.
60. Discuss the "bare area" of the liver, explaining its significance and location within the liver's anatomical structure.
61. Explain the ligament of the liver (ligamentum teres hepatis), including its origin, course, and clinical significance in fetal and adult anatomy.
62. Explore the porta hepatis, detailing its structures and functions in relation to the liver, including the passage of blood vessels and bile ducts.

63. Describe the falciform ligament, its location, and its role in anchoring the liver to the anterior abdominal wall and diaphragm.
64. Discuss the lesser omentum, including its components (hepatogastric and hepatoduodenal ligaments) and its role in liver and stomach function.
65. Explain the different parts of the gall bladder, such as the neck, body, and fundus, and their functions in storing and releasing bile.
66. Explore the extrahepatic biliary apparatus, including the common hepatic duct, cystic duct, and common bile duct, and their roles in bile transport and digestion.
67. Describe the spleen, including its location in the abdominal cavity, its structural components, and its functions in the immune system and blood filtration.
68. Discuss the various parts of the pancreas, such as the head, body, tail, and pancreatic ducts, and their roles in endocrine and exocrine functions.
69. Explain the structure and function of the appendix in the human body, including its potential role in the immune system and digestive health.
70. Explore the anatomy of the anal canal, including its divisions, sphincters, and the transition from the rectum. How does the anal canal contribute to fecal control?
71. Discuss the support structures of the uterus, including ligaments and muscles, and their roles in maintaining the position and stability of the uterus within the pelvis.
72. Define the axes of the uterus, including the anteversion, anteflexion, and retroversion, and their clinical significance in gynecology.
73. Explain the anatomy of the fallopian tubes, detailing their different parts, including the infundibulum, ampulla, and isthmus, and their functions in the reproductive system.
74. Describe the ovaries, their location in the female reproductive system, and their roles in oocyte production and hormone secretion.
75. Explore the anatomy of the testis, including its coverings and internal structures, and its functions in sperm production and hormone secretion.

76. Discuss the covering of the kidney, specifically the renal capsule, and its role in protecting and supporting the kidney's structural integrity.
77. Explain the external features of the kidney, including the renal cortex, medulla, and renal pelvis, and their functions in renal physiology.
78. Discuss the blood supply of the kidney, highlighting the renal arteries, renal veins, and their role in maintaining renal function and filtration.
79. Describe the ureter, including its anatomy, location, and function in transporting urine from the kidney to the urinary bladder.
80. Explain the ligament of the bladder, its structure, and its role in stabilizing the urinary bladder within the pelvic cavity.
81. Define the trigone of the urinary bladder, explaining its anatomical features and significance in bladder function and urinary retention.

Short answers:-

1. Clavicle
2. Humerus
3. Radius
4. Carpal bone
5. Axillary artery
6. Mammary gland
7. Biceps brachii
8. Deltoid
9. Spaces of back
10. Trapezius
11. Serratus anterior

12. Rotator cuff
13. Cubital fossa
14. Triceps brachii
15. Supinator
16. Flexor retinaculum
17. Extensor retinaculum
18. Elbow joint
19. Wrist joint
20. Superior radioulnar joint
21. Thenar muscle
22. Lumbricals
23. Interosseous
24. Brachial artery
25. Superior palmar arch
26. Anatomical snuff box
27. Wrist drop
28. Frozen shoulder
29. Carpal tunnel syndrome
30. Claw hand
31. Erbs point paralysis
32. Palmar aponeurosis
33. Axillary nerve
34. Musculocutaneous nerve

35. Pericardium
36. Pleura
37. Arch of aorta
38. Coronary sinus
39. Bronchopulmonary segments
40. Esophagus
41. Trachea
42. Mediastinum
43. Intercostal muscles
44. Opening of diaphragm
45. Ribs
46. Sternum
47. Crutch palsy
48. Arterial anastomoses around elbow joint
49. Hyaline cartilage
50. Elastic cartilage
51. Fibro cartilage
52. Skeletal muscle
53. Cardiac muscle
54. Sarcomere
55. Compact bone
56. Epiphysis
57. Blood supply of long bone

58. Periosteum
59. Axial and appendicular skeleton
60. Typical vertebrae features
61. Saturday night palsy
62. Contents of axilla
63. Femoral nerve
64. Femoral artery
65. Great saphenous vein
66. Profunda femoral artery
67. Sartorius
68. Adductor canal
69. Adductor compartment
70. Obturator nerve
71. Foot drop
72. Iliofemoral ligament
73. Ligamentum patella
74. Femur/upper end of femur
75. Patella
76. Linea aspera
77. Common peroneal nerve
78. Popliteal artery
79. Popliteal muscle
80. Hamstring muscle

81. Tibia/upper end of tibia
82. Meniscus
83. Cruciate ligament
84. Tibialis anterior
85. Gastrocnemius
86. Soleus
87. Achilles tendon/tendocalcaneous
88. Sustentaculum Tali
89. Deltoid ligament
90. Spring ligament
91. Pott's fracture
92. Arches of foot
93. Plantar aponeurosis
94. Medial longitudinal arch
95. Lateral longitudinal arch
96. Saturday night palsy
97. Crutch palsy
98. Ape thumb deformity
99. Sleeping foot
100. Femoral canal
101. Ischial tuberosity
102. Piriformis
103. Gluteus maximus

104. Rectus sheath
105. Arterial anastomoses around knee joint
106. Parts of stomach
107. Blood supply of stomach
108. Stomach bed
109. Parts of duodenum
110. Lobes of liver
111. Bare area of liver
112. Ligament of liver
113. Porta hepatis
114. Falciform ligament
115. Lesser omentum
116. Parts of gall bladder
117. Extra hepatic biliary apparatus
118. Spleen
119. Parts of pancreas
120. Appendix
121. Anal canal
122. Support of uterus
123. Axes of uterus
124. Fallopian tube/parts
125. Ovary
126. Testis

127. Covering of kidney
128. External features of kidney
129. Blood supply of kidney
130. Ureter
131. Ligament of bladder
132. Trigone of urinary bladder