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MANIPAL UNIVERSITY

MBBS PHASE I STAGE I DEGREE EXAMINATION – MARCH 2016

SUBJECT: ANATOMY – I (ESSAY)

Wednesday, March 09, 2016

Time: 09:00 – 11:00 Hrs.

Max. Marks: 60

1. Mention the different types of epithelia. Give one example for each type
(2½+ 2½ = 5 marks)

2. A 27-year-old man was found to have an unstable right knee joint, following a severe automobile accident. During examination, it was possible to pull the tibia, excessively forward on the femur indicating the damage of one of the ligaments present within the capsule of the knee joint.
 - 2A. Name the ligaments present within the capsule (intracapsular ligaments) of the knee joint
 - 2B. Mention the movements occurring at the knee joint and name any one muscle producing each of these movements.
(2+2+1 = 5 marks)

3. Give the attachments, nerve supply and actions of biceps brachii muscle
(3+1+1 = 5 marks)

4. Describe the structure of Graafian follicle and give its functions
(4+1 = 5 marks)

5. Name any four arteries present in the anterior triangle of the neck. Mention the subdivisions of this triangle
(2+2 = 4 marks)

6. Describe the arterial supply of heart.
(4 marks)

7. Name the bronchopulmonary segments of the right lung. Mention the clinical importance of the bronchopulmonary segments.
(3+1 = 4 marks)

8. After several days of gastric pain, a 30-year-old man was seen in the emergency ward for gastroscopy. During gastroscopy, the posterior wall of the patient's stomach was found to be adherent to the structures behind the stomach.
Name the structures lying behind the stomach.
(4 marks)

- 9A. Mention the various positions of vermiform appendix
9B. Name the artery supplying the vermiform appendix
9C. Mention the clinical significance of the McBurney's point

(1+2+1 = 4 marks)

10. Describe the microscopic structure (histology) of the liver

(4 marks)

11A. Name the clinical condition resulting from the lesion of facial nerve

11B. Describe the extracranial course and distribution of facial nerve

(1+3 = 4 marks)

12. Describe the floor of fourth ventricle of the brain

(4 marks)

13. Name the parts of thyroid gland. Mention the arterial supply and development of thyroid gland.

(2+1+1 = 4 marks)

14. A 74-year-old man was admitted to the hospital as an emergency case as he had not passed urine for last 8 hours. Digital rectal examination revealed a large, firm, fixed swelling anterior to the lower part of rectum below the urinary bladder.

14A. What anatomical structure lies anterior to the lower part of rectum and, if diseased, is likely to interfere with micturition?

14B. Give the relations and arterial supply of that structure.

(1+2+1 = 4 marks)



MANIPAL UNIVERSITY
MBBS PHASE I STAGE I DEGREE EXAMINATION – MARCH 2016
SUBJECT: ANATOMY – II (MCQs)

Wednesday, March 09, 2015

Time: 11:30 – 12:30 Hrs.

Max. Marks: 120

INSTRUCTIONS

1. For each statement, select T (True) or F (False) as your choice.
2. Indicate your choice by darkening the appropriate circle in the answer sheet provided.
3. Use only HB or 2B pencils to darken the circle.
4. Leave blank for Don't Know response.
5. Scoring systems is as follows:

For every Correct response	1 mark is awarded
For every Wrong response	0.5 mark is deducted
For every Don't Know response	No mark is deducted
6. Indicate your roll number (Registration Number) clearly and correctly.
7. Do not write anything in the question paper.
8. The true/false statements are numbered 101 to 160 and 201 to 260 (Total 120 statements).
9. This question paper contains **04 pages**. Please make sure that the question paper provided to you has all the pages.

About the tissues of the body

101. Epithelium lines the hollow organs
102. Collagen fibres are found in the tendon
103. Cardiac muscle cells are multinucleated
104. Axon is an efferent process of a neuron
105. Oligodendrocytes are concerned with myelination

About the hip bone

106. Its anterior superior iliac spine gives attachment to inguinal ligament
107. Hamstring muscles are attached to its ischial tuberosity
108. Its acetabulum articulates with head of the femur
109. Flat muscles of anterior abdominal wall are attached to its iliac crest
110. Articulates with opposite hip bone at the pubic symphysis

About the shoulder joint

111. It has an articular disc
112. It is abducted by deltoid muscle
113. Its glenoid cavity is deepened by glenoidal labrum
114. It supplied by axillary nerve
115. Its common dislocation is in the upper direction

Sternocleidomastoid muscle

116. Separates anterior and posterior triangles of the neck
117. Is supplied by cranial part of accessory nerve
118. Is attached to the sternum below
119. Is attached to the mastoid process above
120. If undergoes trauma, results in a condition called "wry neck"

Muscles supplied by ulnar nerve include

121. Extensor carpi ulnaris
122. Deltoid
123. Flexor pollicis longus
124. Palmaris longus
125. Hypothenar muscles

Psoas major muscle

126. Takes origin from transverse processes of lumbar vertebrae

127. Gets inserted to the lesser trochanter of femur
128. Lies in front of the ureter
129. Flexes the hip joint
130. Forms the floor of the femoral triangle

The umbilical cord

131. Develops from the connecting stalk
132. Contains 2 umbilical veins and 2 umbilical arteries at the time of birth
133. Is surrounded by amnion
134. Is attached to the maternal surface of placenta
135. Contains the Wharton's jelly

The popliteal artery

136. Begins at the adductor opening (hiatus magnus)
137. Descends in front of popliteus muscle
138. Lies in the popliteal fossa
139. Gives rise to anterior and posterior tibial arteries
140. Supplies knee joint

The radial artery

141. Arises from the brachial artery
142. Is a content of cubital fossa
143. Lies in front of lower end of radius
144. Runs in the anterior compartment of forearm
145. Continues as superficial palmar arch

The portal vein

146. Is formed by the union of superior and inferior mesenteric veins
147. Runs behind the bile duct
148. Lies in the right free margin of lesser omentum
149. Receives the left gastric vein
150. Runs behind the third part of duodenum

About the nose

151. Vomer bone forms its septum
152. Inferior nasal concha is a projection from the ethmoid bone
153. Posterior ethmoidal air sinus opens into its sphenoidal recess
154. Auditory tube connects its lateral wall to the middle ear

155. Its floor is formed by hard palate

The trachea

156. Lies in front of pharynx

157. Is lined by stratified squamous epithelium

158. Is anteriorly crossed by arch of aorta

159. Is supplied by inferior thyroid artery

160. Receives its parasympathetic nerve supply from the vagus

The large intestine has

201. Sacculations (haustrations)

202. Villi

203. Taenia coli

204. Appendices epiploicae

205. Peyer's patches

About the duodenum

206. Its first part lies in front of the bile duct.

207. Its second part lies in front of right kidney

208. Its third part receives the opening of bile duct

209. Annular pancreas when present surrounds its fourth part

210. Embryologically it is derived from both midgut and hindgut.

About the anal canal

211. It lies in the perineum

212. It has anal columns in its upper part

213. Below the pectinate line it is pain insensitive

214. It is supplied by superior rectal artery

215. It is one of the sites of portocaval anastomosis

About the kidneys

216. Right kidney is posterior to the liver

217. Left kidney is anterior to the pancreas

218. Loop of Henle is lined by columnar epithelium

219. Glomerulus is a tuft of capillaries

220. Secreting part of kidney is developed from ureteric bud

About the lymphoid organs

221. Crypts of palatine tonsil are lined by stratified squamous epithelium

222. Mucous follicles are present in the palatine tonsil

223. Lymphoid follicles in the lymph nodes contain eccentrically placed artery

224. Spleen has an inner medulla

225. Hassall's corpuscles are present in the thymic lobules

About the lateral ventricle

226. Floor of its anterior horn is formed by head of caudate nucleus

227. Roof of its inferior horn is formed by hippocampus

228. Lateral wall of its posterior horn is formed by tapetum

229. Choroid plexus of its inferior horn is mainly supplied by posterior choroidal artery

230. Thalamostriate vein is in the roof of its central part

In the orbit

231. Superior oblique muscle is supplied by trochlear nerve

232. Inferior oblique muscle depresses the eyeball

233. Branches of ciliary ganglion supply the ciliaris muscle

234. Lateral rectus muscle is supplied by oculomotor nerve

235. Superior rectus rotates the eyeball medially

Nuclei present in the pons include

236. Hypoglossal

237. Oculomotor

238. Abducent

239. Trochlear

240. Vestibular

In the brain

241. Lateral geniculate body is a relay station in the auditory pathway

242. Mammillary body receives the fibres of fornix

243. Interventricular foramen communicates third and lateral ventricles

244. Brodmann's area 17 receives visual sensation

245. Cerebral cortical motor area for leg is supplied by anterior cerebral artery

About the suprarenal glands

- 246. Right suprarenal lies behind inferior vena cava
- 247. Left suprarenal lies behind the left lobe of liver
- 248. Their cortices develop from neural crest
- 249. Each gland is supplied by respective renal artery
- 250. Right suprarenal vein ends in the inferior vena cava

About the mammary gland

- 251. It is supported by suspensory ligaments of Cooper
- 252. Pectoralis major muscle lies behind it
- 253. Most of its lymphatics drain into axillary lymph nodes
- 254. It is supplied by branches of axillary artery
- 255. Lactiferous ducts open on its nipple

About the testis

- 256. Tunica vaginalis is one of its coverings
- 257. Epididymis lies along its anterior border
- 258. It is supplied by a branch of abdominal aorta
- 259. Vein from the left testis drains into inferior vena cava
- 260. Its lymph vessels drain into superficial inguinal lymph nodes

