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01111B

First M.B.B.S. 2019 (New Course) Examination,
Summer (Phase - IV) 2020
ANATOMY - II

Total Duration : Section A + B = 3 Hours

Section B Marks : 80

SECTION - B

- Instructions :**
- 1) Use **blue/black** ball point pen only.
 - 2) Do not write anything on the **blank portion of the question paper**. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) **All questions are compulsory.**
 - 4) The number to the **right** indicates **full marks**.
 - 5) Draw diagrams **wherever necessary**.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.

2. Brief Answer Questions (Any Ten out of Eleven): **[10 × 2 = 20]**

- a) Where is osteomyelitis seen in a long bone in children? Why?
- b) Specify the opening in the abdominal wall in a case of femoral hernia and why is it more common in females.
- c) Name the structures which act as tie-beams in maintaining the medial longitudinal arch?
- d) Describe the actions of popliteus on knee joint. What is its role in preventing meniscal injury?
- e) While performing a paramedian incision, in which direction should the rectus abdominis be retracted and why?
- f) Specify two differences in the histological structure of non-articular hyaline and white fibrocartilage.
- g) Describe the motor nerve supply of the thoracic diaphragm. Why does its irritation cause pain at the tip of shoulder?

- h) Explain the blood-thymic barrier and its role in immunity.
- i) Describe the reverse rotation of midgut loop and its resultant consequences.
- j) Describe the blood supply of testis and the advantage of pampiniform plexus.
- k) Enumerate the layers of thoracic wall pierced by a needle while performing surgical puncture for aspiration of fluid in pleural cavity.

3. Short Answer Questions (Any Eight out of Nine): [8 × 5 = 40]

- a) A gluteal injection given at the wrong site resulted in a positive Trendelenburg sign on the left side. Specify
 - i) The nerve which has been damaged.
 - ii) The muscles affected and on which side?
 - iii) Anatomical basis of the positive Trendelenburg sign. [1 + 2 + 2]
- b) A new-born baby with bluish discoloration of skin (cyanosis) was diagnosed with Tetralogy of Fallot. Explain the embryological basis of this anomaly and the defects associated with it. [1 + 4]
- c) Describe the structure and types of fibrous joints with one example of each type. [5]
- d) Draw and label the microscopic structure of pancreas showing the Endocrine part, exocrine secretory and excretory part. [2 + 3]
- e) Name the part of the peritoneal cavity present behind the stomach. Specify the boundaries of its neck. [1 + 4]
- f) A pancreatic tumour compressed the superior mesenteric artery. Enumerate the branches of this artery and their distribution which will be affected by its obstruction. [2 + 3]
- g) Describe the thoracic duct under the following heads- Formation, course and termination, area of drainage. [3 + 2]
- h) A 40 year old chronic alcoholic presented with profuse and projectile vomiting of blood due to rupture of dilated vessels. He was diagnosed with alcoholic liver cirrhosis (fibrosis) and portal hypertension.
 - i) What is this condition of dilated vessels called?
 - ii) What is the condition of vomiting of blood called?
 - iii) Specify the colour of the vomited blood.
 - iv) Name the vessels involved. [1 + 1 + 1 + 2]
- i) Describe the microscopic structure of the skin of the sole of the foot with the help of a diagram. [3 + 2]

4. Long Answer Questions (Any Two out of Three): [2 × 10 = 20]

- a) A traffic policeman presented with varicose veins. Describe the venous drainage of the lower limb. Enumerate & discuss the role of the factors which assist in this drainage against gravity. Specify the anatomical basis of the nature of veins presented here. Describe the test that can be performed to confirm the diagnosis of sapheno-femoral incompetence.

[3 + 2 + 3 + 2]

- b) Describe the left kidney under the following heads:

- i) Morphology and relations.
- ii) Microscopic structure.
- iii) Embryological development and congenital developmental anomalies.

[3 + 3 + 4]

- c) A 60 year old woman with 5 children presented with prolapsed uterus. Describe the –

- i) Position, peritoneal and visceral relations of the uterus.
- ii) Factors playing a role in support of uterus.
- iii) Histology of uterus in proliferative phase.
- iv) Development of uterus and its anomalies.
- v) Blood supply and lymphatic drainage.

[2 + 3 + 2 + 2 + 1]
