

POSTGRADUATE INSTITUTE OF MEDICINE  
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (SURGERY) - FEBRUARY 2021

Date :- 9<sup>th</sup> February 2021

Time:- 9.30 a.m. – 11.30 a.m.

PAPER I

ANATOMY

Answer all four (04) questions.

Answer each question in a separate book.

1.
  - 1.1. Describe the ligaments of the shoulder joint. (40%)
  - 1.2. Describe the scapular movements. (40%)
  - 1.3. Using a flow chart illustrate the alternative pathway of circulation to the upper limb when there is narrowing of the third part of the subclavian artery. (20%)
2. Discuss the role of muscles and joints in relation to the respiratory movements. (100%)
3.
  - 3.1. Describe arterial supply of stomach. (65%)
  - 3.2. Describe the lymphatic drainage of the stomach. (35%)
4. Describe the course and the distribution trigeminal nerve (excluding its nuclei). (100%)

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**Date :- 9<sup>th</sup> February 2021**

**Time:- 1.00 p.m. – 4.00 p.m.**

**PAPER II**

**PART A (PHYSIOLOGY)**

**Answer all three (03) questions.**

**Answer each question in a separate book.**

1. Outline the functions of thyroid hormones and explain the physiological basis of assessment of the thyroid status in a 40-year-old woman with a goitre.  
(100%)
  
2. Explain the physiological basis of the following:
  - 2.1. The use of depolarizing neuromuscular junction blockers during general anaesthesia and the reversal of blockade. (30%)
  - 2.2. Mechanisms of action of anti-hypertensive agents that act on the renin-angiotensin-aldosterone system. (40%)
  - 2.3. Derangement of water and electrolyte balance following total colectomy. (30%)
  
3. Explain the following:
  - 3.1. The physiological basis of bleeding in a patient with severe idiopathic thrombocytopaenic purpura. (30%)
  - 3.2. The regulation of intracranial pressure and its effects on cerebral blood flow. (40%)
  - 3.3. The physiological changes that occur following a tracheostomy. (30%)

Contd.../2-

**PART B (PATHOLOGY)**

**Answer all three (03) questions.**

**Answer each question in a separate book.**

4. Discuss the pathological changes and possible clinical outcomes of post-traumatic skin and soft tissue loss in the ankle region, which have healed by secondary intention. (100%)
  
5. A middle-aged man presenting with lower abdominal pain is found to have a palpable mass in the right iliac fossa.
  - 5.1. What are the possible causes for the right iliac fossa mass in this patient? (10%)
  - 5.2. Describe the aetiopathogenesis of three (03) of the diseases mentioned in 5.1. (60%)
  - 5.3. Outline the complications that could arise in each of the three (03) diseases mentioned in 5.2. (30%)
  
6. Write notes on:
  - 6.1. Aetiopathogenesis and complications of gallstones. (35%)
  - 6.2. Pathological basis of tumour nomenclature. (30%)
  - 6.3. Pathogenesis and complications of abdominal aortic aneurysm. (35%)