

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (RESTORATIVE DENTISTRY) –
SEPTEMBER/OCTOBER 2019

Date :- 11th November 2019

Time :- 9.00 a.m. – 11.00 a.m.

PAPER I

Answer two (02) questions from each part.
Answer each question in a separate book.

PART A (GENERAL ANATOMY)

1.
 - 1.1. Describe the arrangement of superficial and deep temporal fascia indicating related structures. (30 marks)
 - 1.2. Outline the intracranial pathway of the facial nerve and its branches. (30 marks)
 - 1.3. Describe the pharyngeal tissue spaces indicating their clinical relevance. (40 marks)
2.
 - 2.1. Describe the anatomical significance of transverse thoracic plane. (30 marks)
 - 2.2. List the structures in the posterior mediastinum and describe their immediate relations. (40 marks)
 - 2.3. In respect of the diaphragm
 - 2.3.1. State its attachments (10 marks)
 - 2.3.2. State the structures passing through the diaphragm indicating the vertebral levels. (20 marks)
3.
 - 3.1. Outline the triangles of the neck indicating their boundaries and contents. (40 marks)
 - 3.2. State the origin of the right phrenic nerve and outline its course in the neck. (20 marks)
 - 3.3. Describe the immediate relations of the submandibular gland indicating their relevance in clinical practice. (40 marks)

PART B (DENTAL ANATOMY)

- 4.
- 4.1. List five (05) differences seen in the occlusal surfaces of permanent mandibular first and second molars. (20 marks)
- 4.2. Describe how the morphology of the dental pulp of a primary tooth differs from that of a permanent tooth. (20 marks)
- 4.3. Explain how the structure of the dental pulp is adapted to perform its functions. (20 marks)
- 4.4. Describe the age related changes of the dental pulp indicating their clinical implications. (40 marks)
- 5.
- 5.1. List the different types of cementum indicating their origin, location and function. (30 marks)
- 5.2. List the variations of cemento-enamel junction. (15 marks)
- 5.3. Describe the anomalies in cementogenesis indicating their clinical significance. (40 marks)
- 5.4. Describe acid-etching of enamel. (15 marks)
- 6.
- 6.1. With regard to junctional epithelium
- 6.1.1. Describe the structure. (30 marks)
- 6.1.2. Outline the clinical significance. (20 marks)
- 6.2. Outline the arrangement of principle fibre-bundles of periodontal ligament indicating the clinical significance. (30 marks)
- 6.3. Discuss the role of cell rests of Malassez in ensuring periodontal integrity. (20 marks)

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SEPTEMBER/OCTOBER 2019

Date:- 13th November 2019

Time:- 9.00 a.m. – 11.00 a.m.

PAPER II

Answer two (02) questions from each part.
Answer each question in a separate book.

PART A (PHYSIOLOGY)

1.
 - 1.1. Define the term “pain”. (10 marks)
 - 1.2. Explain the role of prostaglandin inhibitors in pain relief. (20 marks)
 - 1.3. Explain the role of opioids in pain control. (40 marks)
 - 1.4. Discuss the usefulness of gate control theory in pain relief giving examples. (30 marks)

2.
 - 2.1. Explain the role of glucocorticoids on different organs and tissues. (60 marks)
 - 2.2. State the regulatory mechanisms of glucocorticoids. (20 marks)
 - 2.3. State why should a patient on long term corticosteroid therapy be tailed off the medication rather than stopping the medication abruptly? (20 marks)

3. Explain the physiological basis of the following observations.
 - 3.1. Salivary potassium level is increased in xerostomia. (40 marks)
 - 3.2. Vitality of a tooth can be determined by using a pulp tester. (30 marks)
 - 3.3. Prolonged use of non-steroidal anti-inflammatory drugs may lead to peptic ulceration. (30 marks)

PART B (PATHOLOGY)

- 4.
- 4.1. Define the term “autoimmunity”. (15 marks)
 - 4.2. Define the term “immune tolerance”. (15 marks)
 - 4.3. Explain the mechanisms of different ways of achieving immune tolerance. (45 marks)
 - 4.4. List five (05) autoimmune disorders and explain the aetiopathogenesis of one (01) of the diseases you mentioned. (25 marks)
- 5.
- 5.1. Define the term “Shock”. (15 marks)
 - 5.2. List different types of shock. (25 marks)
 - 5.3. Explain the aetiology and pathogenesis in relation to different types of shock mentioned in 5.2. (60 marks)
- 6.
- 6.1. Describe the basic structure of a virus. (20 marks)
 - 6.2. Explain how a typical virus differs from a typical bacterium. (20 marks)
 - 6.3. Explain the ‘cytopathic effect’ of virus including its importance in clinical practice. (40 marks)
 - 6.4. State two (02) viral diseases causing orofacial ulceration in children with their causative agents. (08 marks)
 - 6.5. State three (03) oncoviruses and the neoplasms caused by them in head and neck region. (12 marks)