

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (ORAL & MAXILLOFACIAL SURGERY) SEPTEMBER/OCTOBER 2019

Date:- 11th November 2019

Time:- 9.00 a.m. – 12.00 noon

PAPER I

Answer three (03) questions from each part.

Answer each question in a separate book.

PART A (GENERAL ANATOMY)

1.

- 1.1. Describe the course of the thoracic duct. (40 marks)
- 1.2. Name the tributaries of the thoracic duct. (30marks)
- 1.3. State the areas drained by the thoracic duct. (20 marks)
- 1.4. State two (02) clinical situations where thoracic duct may be blocked or damaged. (10 marks)

2.

- 2.1. State the attachments, nerve supply and actions of extraocular muscles. (50 marks)
- 2.2. Explain the anatomical basis of superior orbital fissure syndrome. (50 marks)

3.

- 3.1. List the functional components of the mandibular nerve innervations indicating the relevant nuclei. (50 marks)
- 3.2. Outline the extracranial course of the mandibular nerve. (30 marks)
- 3.3. State the relevance of the course of mandibular nerve to the pre-natal development of the mandible. (20 marks)

4.

- 4.1. Outline two (02) possible pathways through which an odontogenic infection could spread into the mediastinum. (30 marks)
- 4.2. Describe the maxillary sinus under the following
 - 4.2.1. Development (10 marks)
 - 4.2.2. Nerve supply (25 marks)
- 4.3. Explain the possible signs and symptoms caused by the local spread of a maxillary sinus carcinoma. (35 marks)

PART B (DENTAL ANATOMY)

- 5.
- 5.1. Describe the myoepithelial cells under the following
- 5.1.2. Structure (20 marks)
- 5.1.2. Functions (30 marks)
- 5.1.3. Clinical relevance (20 marks)
- 5.2. State the age changes of salivary glands in relation to structure, salivary contents and composition. (30 marks)
- 6.
- 6.1. State the structural adaptations of the junctional epithelium in maintaining the stability of dentogingival junction (30 marks)
- 6.2. State the composition of the crevicular fluid. (40 marks)
- 6.3. Explain the clinical significance of the composition and the flow rate of crevicular fluid (30 marks)
- 7.
- 7.1. List the connective tissue fibres which can be identified in the dental pulp. (15 marks)
- 7.2. Discuss the role of the fibres mentioned in 7.1. (50 marks)
- 7.3. Discuss the age changes of the dental pulp and state their clinical relevance. (35 marks)
- 8.
- 8.1. Discuss the differences between cementum and the bone. (20 marks)
- 8.2. List the different types of cementum seen in human teeth. (20 marks)
- 8.3. List the functions of the cementum. (30 marks)
- 8.4. Describe how the physicochemical properties of cementum help in clinical situations. (30 marks)

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (ORAL & MAXILLOFACIAL
SURGERY) – SEPTEMBER/OCTOBER 2019

Date:- 13th November 2019

Time:- 9.00 a.m. - 12.00 noon

PAPER II

Answer three (03) questions from each part.
Answer each question in a separate book.

1.
 - 1.1. Define “circulatory shock”. (10 marks)
 - 1.2. State the clinical parameters that can be used to manage a patient with acute severe blood loss following a road traffic accident. (20 marks)
 - 1.3. Describe the physiological factors which determine the recovery of a patient from moderate degree of shock. (30 marks)
 - 1.4. Explain the differences in the principles of management of hypovolemic shock and anaphylactic shock. (40 marks)
2.
 - 2.1. Describe the mechanism of transmission of a nerve impulse from a somatic nerve to a skeletal muscle resulting in a muscle twitch. (50 marks)
 - 2.2. Explain the basis of administering a depolarizing blocker prior to maxillofacial surgery. (25 marks)
 - 2.3. Explain the basis of injecting botulinum toxin in masseteric hypertrophy. (25 marks)

3.
 - 3.1. Describe the pathophysiological basis of developing carpo-pedal spasms following a prolong cry. (30 marks)
 - 3.2. Outline how biochemical investigations help in differentiating osteomalacia, Paget disease and brown tumour of hyperparathyroidism. (30 marks)
 - 3.3. Explain the physiological basis of renal osteodystrophy. (40 marks)
4. Explain the physiological basis of the following observations.
 - 4.1. A patient feels cold in the extremities and experiences chills and rigors at the onset of a fever episode. (30 marks)
 - 4.2. Oedema is seen in right heart failure. (30 marks)
 - 4.3. Cushing syndrome may cause hypertension, central obesity and hypokalemia. (40 marks)

PART B (PATHOLOGY)

5.
 - 5.1. Describe the pathogenesis of a granuloma. (40 marks)
 - 5.2. List five (05) orofacial conditions characterized by presence of granuloma on histology. (20 marks)
 - 5.3. Mention one (01) other pathological process that occurs in a granuloma. (10marks)
 - 5.4. List the different types of the pathological process that you mentioned in 5.3. giving examples. (30 marks)

Contd..../3-

6.

6.1.

6.1.1. Describe the basic structure of a virus. (20 marks)

6.1.2. Explain how a typical virus differs from a typical bacterium. (20 marks)

6.2. Describe 'cytopathic effects' of a virus including its use in clinical practice. (40 marks)

6.3.

6.3.1. Name two (02) viral diseases with orofacial ulcerations mentioning the causative agents. (08 marks)

6.3.2. Name three (03) oncoviruses and the respective neoplasms in the head and neck region caused by these viruses. (12 marks)

7.

7.1. Define the term "paraneoplastic syndrome". (10 marks)

7.2. Outline the underlying mechanism/s responsible for the paraneoplastic effects of two different types of malignancies. (30 marks)

7.3. Describe the other clinical effects (excluding paraneoplastic effects) of malignant neoplasms. (30 marks)

7.4. Outline the different pathways of spread of a malignant neoplasm. (30 marks)

8.

8.1. List four (04) different types of embolism. (20 marks)

8.2. Describe the aetiopathogenesis of each type of embolism mentioned in 8.1. (60 marks)

8.3. Explain the complications of one (01) type of embolism mentioned in 8.2. (20 marks)