

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (RESTORATIVE DENTISTRY) -
OCTOBER 2013

Date :- 9th October 2013

Time :- 1.00 p.m. – 4.00 p.m.

PAPER 1.3

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

PART A (GENERAL ANATOMY)

1.
 - 1.1. Describe the attachments of mylohyoid and buccinator muscles. (40 marks)
 - 1.2. Explain how the above mentioned muscle attachments influence the spread of odontogenic infections (60 marks)
2.
 - 2.1. State the boundaries of the carotid triangle. (20 marks)
 - 2.2. List the nerves and vessels present in the carotid triangle. (40 marks)
 - 2.3. Describe the extracranial course of one of the cranial nerves mentioned in 2.2. (40 marks)
3.
 - 3.1. Describe the morphology of the maxillary sinus (40 marks)
 - 3.2. Outline the blood supply, nerve supply and lymphatic drainage of the maxillary sinus (30 marks)
 - 3.3. Outline the clinical relevance of the maxillary sinus (30 marks)
4.
 - 4.1. Describe the relations of the parotid gland (60 marks)
 - 4.2. Outline the clinical significance of the relations you have mentioned in 4.1 (40 marks)

PART B - DENTAL ANATOMY

5.

- 5.1. Discuss the morphological variations of the cementoenamel junction (CEJ) (25 marks)
- 5.2. State five (05) clinical procedures that would affect the structure of the CEJ (25 marks)
- 5.3. Explain how clinical procedures mentioned in 5.2. would predispose the CEJ to develop pathological changes (50 marks)

6.

- 6.1. List the cell types present in the lamina propria of the oral mucosa (20 marks)
- 6.2. State the functions of the cell types mentioned in 6.1 (20 marks)
- 6.3. Describe the protective mechanisms that exist in the oral cavity against the microorganisms (60 marks)

7.

- 7.1. List the stages in the life cycle of the ameloblast. (25 marks)
- 7.2. Explain the characteristics of the aprismatic/prismless enamel. (25 marks)
- 7.3. Outline the defects in enamel formation (50 marks)

8.

- 8.1. Describe the tertiary dentine and explain its clinical significance (40 marks)
- 8.2. Describe the structure of the attached gingiva (30 marks)
- 8.3. Describe the functions of the gingival crevicular fluid and explain its clinical significance (30 marks)

(05) - 9.11.2013 (1.2.3) (1.3) ✓

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**SELECTION EXAMINATION IN MD ((ORAL & MAXILLOFACIAL
SURGERY) MD (RESTORATIVE DENTISTRY), MD (ORTHODONTICS)**
OCTOBER 2013

Date :- 10th October 2013

Time :- 9.00 a.m. – 12.00 noon

PAPER II

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

PART A (PHYSIOLOGY)

1.

1.1. Explain the Starling's forces acting on the capillary membrane.
(25 marks)

1.2. Explain the causation of oedema in the following conditions based on your answer to 1.1.

1.2.1. Venous obstruction (15 marks)

1.2.2. Hypoproteinaemia (15 marks)

1.2.3. Hypersensitivity reaction (15 marks)

1.3. Explain the physiological basis for the use of calcium channel blockers in cardiovascular disease. (30 marks)

Contd..../2-

2.

2.1. Compare and contrast

2.1.1. "upper motor neuron lesion" and "lower motor neuron lesion".
(20 marks)

2.1.2. "competitive neuromuscular junction blocker" and "non-competitive neuromuscular junction blocker".
(20 marks)

2.2. Explain the physiological basis for the use of opioid peptides in pain management.
(30 marks)

2.3. Explain the physiological basis of "cough reflex".
(30 marks)

3.

3.1. Describe the functions of adrenal steroids.
(40 marks)

3.2. Discuss the physiological basis of using steroids in clinical practice.
(40 marks)

3.3. Outline the complications of steroid usage.
(20 marks)

4.

4.1. List the functions of the liver.
(20 marks)

4.2. List the clinical features of liver failure.
(30 marks)

4.3. Explain the physiological basis of the clinical features listed in 4.2.
(50 marks)

Contd..../3-

PART B (PATHOLOGY)

5.

- 5.1. Explain the role of p53 gene and Retinoblastoma gene in cell cycle control and carcinogenesis. (50 marks)
- 5.2. "Angiogenesis is an important event in carcinogenesis"
Discuss the above statement. (25 marks)
- 5.3. Describe the ways in which oncogenic viruses contribute to carcinogenesis. (25 marks)

6.

- 6.1. Discuss the role of macrophage in chronic inflammation. (50 marks)
- 6.2. Explain the effects of inflammatory process in the progression of periodontal disease. (50 marks)

7.

- 7.1. State how you would minimize surgical site infections in your practice. (30 marks)
- 7.2. Discuss the significance of opportunistic infections seen in clinical practice. (30 marks)
- 7.3. List the steps you would take to protect you, your staff and the patients from cross infections. (20 marks)
- 7.4. List the effects ~~of~~ nosocomial infections on health care delivery system (20 marks)

8.

- 8.1. Define the term "cyst" (10 marks)
- 8.2. List five (05) different mechanisms of cyst formation giving appropriate clinical examples. (20 marks)
- 8.3. State how a cyst differs from an abscess. (20 marks)
- 8.4. List histopathological differences between an acute and a chronic abscess. (20 marks)
- 8.5. A patient presented with multiple small abscesses in the submandibular region of two months duration.
List five (05) conditions to be considered in the differential diagnosis. (30 marks)

9/10/2013