POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (ORAL & MAXILLOFACIAL SURGERY)
NOVEMBER 2012

Date ; 21st November 2012 Time ; 1.00 p.m.– 4.00p.m.

PAPER 1.1

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

PART A (GENERAL ANATOMY)

1.

1.1. Describe the relations of the left sternocleidomastoid muscle. (80 marks)

1.2. Describe the actions of sternocleidomastoid muscle. (20 marks)

2.

2.1. Describe the parasympathetic supply of the parotid and submandibular glands. (80 marks)

2.2. Describe the conditions of aberrant innervations with regards to the nerves you mentioned in 2.1. (20 marks)

3.

3.1. List the nerves which supply the eye. (10 marks)

3.2. State the functions of the nerves mentioned in 3.1. (40 marks)

3.3. State how knowledge in anatomy helps you to describe the clinical features following injury to the nerves mentioned in 3.1. (50 marks)

4.

4.1. List the different structures attached to the mandibular ramus.. (20 marks)

4.2. Describe the relations of the masseter muscle. (40 marks)

4.3. Explain the clinical importance of the relations of the mandibular ramus. (40 marks)

PART B (DENTAL ANATOMY)

5.

5.1. State the components and their functions of the enamel organ at the "late bell" stage. (20 marks)

5.2. Describe the role of the enamel organ after the formation of the crown of an upper 1st permanent molar tooth. (50 marks)

5.3. List three (03) consequences that can occur due to malfunction of the enamel organ in the stage mentioned in 5.2 and indicate their clinical relevance. (30 marks)

6. Describe the structure of the following indicating the importance of this knowledge for clinical practice.

6.1. Dentinoenamel junction (35 marks)

6.2. Mucous membrane of the dorsum of the tongue (40 marks)

6.3. Cementoenamel junction (25 marks)

7.

7.1. Describe the structure and composition of dento-gingival junction in health. (60 marks)

7.2. List the similarities and differences that exist between the dento-gingival junction and peri-implant mucosa in relation to a titanium implant. (20 marks)

7.3. State the clinical relevance of the features mentioned in 7.2. (20 marks)

8

8.1. Describe the structure including histology of the capsule and its related components of the temporo-mandibular joint (TMJ) in an adult (60 marks)

8.2. Describe how these components help in the normal function of the TMJ. (40 marks)

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SELECTION EXAMINATION IN MD (ORAL SURGERY), MD (RESTORATIVE DENTISTRY), MD (ORTHODONTICS)
OCTOBER 2011

Date : 13th October 2011 Time : 9.00 a.m. – 12.00 noon

PAPER 1I

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

PART A (PHYSIOLOGY)

1. A 60 year old women was suffering from an endocrine disorder.

She was found to have hyperpigmentation of the skin, lips, oral mucosa and gingivae

Her blood pressure was 80/50 nnHg
Her serum Na+ was 130 mEq/L, K+ 6.5 mEq/L and $HC0_3^-$ 20 mEq/L
She had lost 6 kg of body weight during past few months

1.1. What is the possible endocrine disorder this woman is suffering from? (05 marks)

1.2. List three (03) groups of hormones secreted by the affected endocrine gland and mention one (01) example for each group (15 marks)

1.1. Explain the physiological basis of

1.1.1. Hyperpigmentation of the skin, lips, oral mucosa and gingivae (20 marks)

1.1.2. Blood pressue of 80/50 mmHg (20 marks)

1.1.3. Serum HCO_3^- 20 mEq/L (20 marks)

1.1.4. Weight loss (20 marks)

2. Explain the physiological basis of the following

2.1. A patient with chronic renal failure presents with osteomalacia (30 marks)

2.2. Acute obstruction in the urinary tract leading to reduction in glomerular filtration rate (20 marks)

2.3. Polyurea in patients with diabetes mellitus (25 marks)

2.4. Primary hyperparathyroidism leading to hypercalcaemia and hypophosphataemia (25 marks)

3.

3.1. Explain the term “reflex” (10 marks)

3.2. Explain the physiological basis of the following reflexes giving examples

3.2.1. Stretch reflex (40 marks)

3.2.2 Withdrawal reflex (30 marks)

3.2.3. Neurohumoral reflex (20 marks)

4. Explain the physiological basis of

4.1. Intermittent claudication (30 marks)

4.2. Referred pain (30 marks)

4.3. Cyanosis in tetralogy of Fallot (40 marks)

PART B (PATHOLOGY)

5.

5.1. What are the cardinal signs of acute inflammation ? (10 marks)

5.2. Describe the underlying pathological process for each of the signs mentioned in 5.1 (40 marks)

5.3. Explain the sequelae of acute inflammation (50 marks)

6.

6.1. Define the term “neoplasia” (10 marks)

6.2. Explain the process of “multistage carcinogenesis” (40 marks)

6.3. Describe the steps involved in metastasis of a malignancy (50 marks)

7.

7.1. Define the term “infarct” (10 marks)

7.2. Mention the characteristics of red and white infarcts (20 marks)

7.3. List the factors that influence in the development of an infarct (30 marks)

7.4. Describe briefly the consequences and complications of myocardial infarction (40 marks)

8.

8.1. List different types of “hypersensitivity reactions” (10 marks)

8.2. Outline the basic immune mechanisms involved in each type mentioned in 8.1 (60 marks)

8.3. Give two (02) examples of diseases for each type you mentioned in 8.1 (30 marks)