

Date :- 4<sup>th</sup> July 2023

Time:- 1.00 p.m. – 4.00 p.m.

Answer all six (06) questions.

Each question should be answered in a separate book.

1. A 60-year-old man requests management of his worn dentition. On examination, the patient has a fully dentate upper arch and apart from the missing lower first molars, has all remaining teeth in his lower arch. The upper and lower anterior teeth exhibit severe tooth-wear.

1.1. List the possible concerns of the patient. (20 marks)

1.2. Explain the important aspects of the history and examination that would help you diagnose and manage this patient. (40 marks)

1.3. Outline the management of this patient. (40 marks)

2.

2.1. Explain the methods in managing “separated instruments” in endodontics. (50 marks)

2.2. Describe the clinical findings that would favour root-resection of a multi-rooted tooth. (50 marks)

3. A 75-year-old patient requests replacement of complete dentures which he had been wearing for 15 years. Both dentures are esthetically acceptable but ill fitting. On examination, a severely resorbed mandibular ridge (Atwood-V) opposed by a moderately resorbed maxillary ridge was observed.

3.1. List the challenges that may be expected when fabricating a set of conventional complete dentures for this patient. (20 marks)

3.2. Describe how the challenges stated in 3.1 could be overcome during the fabrication of complete dentures for this patient. (50 marks)

3.3. Outline alternative options you would consider to restore his oral functions. (30 marks)

Contd.../2-

Master copy

4. A 70-year-old long-term smoker presented with an acquired maxillary defect on the right side involving his hard and soft palate. Remaining maxillary teeth (21 to 27) are periodontally compromised with multiple caries. 34 to 44 are present in the mandibular arch.

4.1. State the importance of classifying acquired maxillary defects. (20 marks)

4.2. Describe the factors to be considered when planning prosthetic treatment for the patient. (50 marks)

4.3. Outline the management care plan for the patient. (30 marks)

5.

5.1. Briefly explain prosthodontically driven implant placement. (20 marks)

5.2. Describe the factors to be considered in pre surgical planning of an implant retained anterior crown to achieve a natural appearance. (40 marks)

5.3. Explain the management of an implant retained prosthesis showing mobility, three months after restoration. (40 marks)

6.

6.1. Describe when you would prescribe a prosthesis in a partially dentate patient. (50 marks)

6.2. Discuss prosthetic options available to rehabilitate a partially dentate patient and provide justification for your answer. (50 marks)

*Master copy*

**POSTGRADUATE INSTITUTE OF MEDICINE**  
**UNIVERSITY OF COLOMBO**

**MD (RESTORATIVE DENTISTRY) EXAMINATION - JULY 2023**

**PAPER II**

**Date :- 5<sup>th</sup> July 2023**

**Time:- 9.00 a.m. - 12.00 noon**

**Answer all six (06) questions.**

Each question should be answered in a separate book.

1. A 44-year-old man presents complaining of increasing gaps between his anterior teeth. Basic Periodontal Examination (BPE) score is 4 in all sextants. He has no significant medical history and has been a smoker for 13 years.

1.1. List the effects of smoking on the pathogenesis of his periodontal condition. (20 marks)

1.2. List the effects of smoking on the prevalence and severity of periodontal disease. (20 marks)

1.3. List the effects of smoking on periodontal therapy. (20 marks)

1.4. Describe the overall management of this patient. (40 marks)

2.

2.1. Explain the healing response/s that could result in the following treatment modalities.

2.1.1. Non-surgical deep periodontal debridement/subgingival instrumentation in a patient with periodontitis. (20 marks)

2.1.2. Intrascular incision on a periodontally healthy tooth during a periodontal flap extension. (10 marks)

2.1.3. Open flap debridement with placement of alloplastic bone materials in an intra-bony defect. (20 marks)

2.2. List the measures you would take during patient care to maximize periodontal wound healing. (20 marks)

2.3. Based on current evidence, outline the role of growth factors in periodontal healing. (30 marks)

Cond.../2-

3. A 6-year-old anxious child presents with a painful 75. Examination reveals multiple carious teeth.

3.1. Outline the factors that could make this child anxious towards dental treatment. (20 marks)

3.2. Explain three (03) types of behaviour modification methods that could be used during management of this child. (30 marks)

3.3. If the behaviour modification methods fail, explain two (02) pharmacological methods that you can use in managing this patient. (30 marks)

3.4. List the contraindications of the two (02) methods described in 3.3. (20 marks)

4. A 13-year-old boy presented with traumatized lower anterior teeth, three hours after a sports injury. Teeth 31 and 41 had an alveolar bone fracture with detached gingiva. 42 had avulsed and was stored in normal saline. Deep soft tissue laceration of the lower lip was observed.

4.1. List the investigations that you would carry out in relation to lower anterior teeth. Provide reasons for your answer. (20 marks)

4.2. Explain the emergency management strategies of this patient. (40 marks)

4.3. Explain the management of 42 at follow-up visits. (30 marks)

4.4. List the factors that would affect prognosis of 42. (10 marks)

5. An 8-year-old boy presented with an unerupted upper right central incisor (11) and an over retained 51.

5.1. List five (05) possible causes for the unerupted tooth 11. (25 marks)

5.2. List the radiological investigations recommended for an initial diagnosis. Provide reasons for your choice of radiological views. (30 marks)

5.3. If tooth 11 is present, what important factors should be considered during treatment planning to align 11 into the arch? (25 marks)

5.4. State the importance of facilitating eruption of an impacted tooth through the attached gingivae. (05 marks)

5.5. List the treatment options available to manage the impacted 11. (15 marks)

Contd..../3-

Marker Copy

6. A 45-year-old man receiving minor oral surgical procedure under Local Anaesthesia (LA) suddenly collapses on the dental chair. His body weight is 72 Kg.

6.1. List five (05) possible reasons (excluding anaphylaxis reaction). (10 marks)

6.2. Outline the immediate management steps in the first 20 minutes while investigating the cause for the collapse. (20 marks)

6.3. It was immediately found out that the reason for the collapse is due to anaphylaxis.

6.3.1. Give two (02) clinical features which suggest diagnosis of anaphylaxis. (15 marks)

6.3.2. Outline the pharmacological management of anaphylaxis. (15 marks)

6.4.

6.4.1. List the ingredients of LA solution stating their function. (20 marks)

6.4.2. Calculate the maximum safe volume of LA for this patient. (20 marks)

Master copy