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Exam Preparatory Manual for Undergraduates

FIXED PARTIAL DENTURES

Lovely M

Foreword
NS Azhagarasan

Contents

SECTION 1: ESSAYS

1. Discuss the importance of diagnosis and treatment planning in fixed partial denture 3
2. List the ideal requirements of an abutment tooth and describe the steps taken to maintain biological integrity while preparing teeth for fixed partial denture 9
3. Describe various methods used for gingival retraction and add a note on the advantages of fluid control and tissue displacement 15
4. Describe the methods used to classify fixed bridges. Add a note on types of retainers used in fixed partial dentures 22
5. Define and classify retainers. List the advantages and disadvantages of partial veneer crown over other types of retainers. What are the factors that come into play in the selection of retainers? 28
6. Define retention and resistance form in fixed partial denture. What are the factors affecting retention and resistance in posterior tooth preparation? 33
7. Classify finish lines. Enumerate the functions, indications, advantages and disadvantages of finish lines. Add a note on selection of type of finish line to be used 36
8. Illustrate with diagrams, the tooth preparation on right upper central incisor for receiving porcelain jacket crown. Add a note on the advantages, indications and contraindications of all porcelain jacket crown 43
9. Define a crown and mention the advantages, disadvantages and indications of a full metal crown. Describe in detail, with diagrams, the step-by-step procedure in the preparation of a full-metal crown on a mandibular first molar 46
10. Describe in detail, with diagrams, the step-by-step preparation of a maxillary canine to receive a three quarter crown. Explain and justify different impression techniques for fixed partial denture 50
11. Name the component parts of a bridge. Define and classify pontics. Add a note on selection of pontic design in anterior and posterior teeth. What are the requirements of a pontic? 60
12. What are the biological, mechanical and esthetic considerations in designing a pontic? Add a note on fabrication of pontics 67
13. Describe different types of provisional restorations. Describe various techniques used for making provisional restoration for anterior and posterior tooth preparation 72
14. Describe ideal requirements of luting agents and various luting agents used in crown and bridge cementing. Explain the procedure and care to be taken to lute porcelain jacket crowns 76
15. Classify adhesive bridges/resin-bonded bridges. Cite the advantages, disadvantages, indications, contraindications and preparation steps. Add a note on types of bonding to metal and tooth 82

16. What are the requirements of dies? Describe materials used in preparation of dies and few techniques used for preparing dies? 88
17. Classify ceramics. Enumerate its advantages and disadvantages. Explain the mechanism of bonding and describe the laboratory steps involved in fabrication of different ceramics 95
18. What are the types of veneering materials? Describe their advantages, disadvantages and indications. Add a note on the recent advances in veneering materials used in fixed partial denture 103
19. Discuss in detail failures in fixed dental prosthesis 107
20. Classify and discuss on various impression procedures involved in implant-supported prosthesis 112
21. Discuss on implants for fixed prosthesis work 118
22. Classify types of implants and discuss the role of surface topography of implants in osseointegration 123
23. Explain procedural options for single-tooth implant prosthesis 127
24. Discuss the immediate loading and progressive loading of endosseous implants. 130
25. Occlusal consideration for implant-supported prosthesis 134
26. Recent advances in surgical techniques 139
27. Discuss implant failures and precautions that need to be taken 142

SECTION 2: SHORT NOTES

1. Diagnostic aids in fixed partial denture 149
2. Importance of diagnostic casts 150
3. Advantages, disadvantages, indications and contraindications of fixed partial dentures 151
4. Importance of radiologic examination in crown and bridge prosthesis 152
5. Questionable abutments 153
6. Mouth preparation in fixed partial denture 155
7. Requirements of a crown 157
8. Double arch impression technique 158
9. Double mix technique 160
10. Adhesives in dentistry/dentin bonding agents 161
11. Factors in shade matching in all ceramic restorations 163
12. Methods to remove crowns and bridge 165
13. Ante's law and its significance 167
14. Shortened dental arch concept (SDA Concept) 169
15. Rigid connectors 169
16. Soldering 171
17. Cast core jacket crown 174
18. Richmond crown 179
19. Davis crown 181
20. Axio-proximal grooves 182

21. Pier abutment 184
22. Causes of abutment failure 187
23. Mesial half crown 189
24. Cantilever fixed partial denture 190
25. Describe cementation of all ceramic restorations 191
26. Recent advances in Investment materials 193
27. Retention in fixed partial denture 195
28. Instructions to crown and bridge patients regarding care and maintenance 197
29. Articulators 197
30. Fixed removable prosthodontics 199
31. Dental laboratory form 201
32. Dahl's appliance 202
33. Management of tooth surface loss (TSL) 205
34. Flowchart for surgical procedure in implant placement 207
35. All-ceramic restoration 208
36. Material selection and failures in RBFPD 212
37. Osseointegration 214
38. Alloys used in fixed partial denture 216
39. Non-rigid connectors/stress breakers in fixed partial denture 219
40. Wax patterns 221
41. Functionally generated pathways (Meyer) 227
42. Interocclusal records 229
43. Lug seat 232
44. Soft tissue mask for implant models 233
45. Recall and maintenance 234
46. Treating tilted molars 236
47. Telescopic crown 237
48. Finishing and polishing 238
49. Mention the anatomical concerns for implant placement in posterior maxilla and mandible region 241
50. Pickling 242
51. Defects in casting 243
52. Myofascial pain dysfunction syndrome 245
53. Implant-supported fixed partial denture 247
54. Full-mouth rehabilitation 250
55. Contraindications for implant placement 253
56. Laboratory procedures in fixed partial denture 253
57. Tensofrictional resistance 256

SECTION 3: MCQ, EXTENDED MATCHING QUESTIONS, SHORT ANSWER QUESTIONS, LAMINATE VENEERS AND RECENT ADVANCES IN FIXED PARTIAL DENTURE

1. Introduction to FPD 261
2. Fundamentals of occlusion 266
3. Articulation and articulators 271
4. Interocclusal records 274
5. Treatment planning single tooth 277
6. Treatment planning for missing tooth 280
7. Principles of tooth preparation 283
8. Full coverage restorations 290
9. Partial coverage restorations 298
10. Intracoronal restorations 303
11. Provisional restoration 307
12. Fluid control 312
13. Impressions 319
14. Working cast and dies 325
15. Cementation 328
16. Pontics 333
17. Failures 339
18. Laminate veneers 343
19. Porcelain laminate veneers 345
20. Fixed partial dentures—an insight 352

Index *369*

SECTION 3

MCQ, Extended Matching Questions, Short Answer Questions, Laminate Veneers and Recent Advances in Fixed Partial Denture

1. Introduction to FPD
2. Fundamentals of occlusion
3. Articulation and articulators
4. Interocclusal records
5. Treatment planning single tooth
6. Treatment planning for missing tooth
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9. Partial coverage restorations
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18. Laminate veneers
19. Porcelain laminate veneers
20. Fixed partial dentures—An insight

INTRODUCTION TO FPD

MULTIPLE CHOICE QUESTIONS

1. The width of attached gingiva of an abutment teeth is evaluated with help of:

A. Periapical radiograph.
B. Bitewing radiograph.
C. Intraoral examination.
D. Diagnostic casts.
E. Extraoral examination.

2. Which of the following are assessed during the intraoral examination for fixed dental prosthesis?

A. Attached gingiva.
B. Gingival architecture and stippling.
C. Amount of plaque retention.
D. Occlusal prematurities.
E. All of the above.

NOTE—apart from the above the other factors assessed during intraoral examination are non-working interferences, tooth mobility and location, depth of pocket.

3. Choose the items which can be assessed using a diagnostic cast.

A. Inclination of the tooth.
B. Length of the abutment tooth.
C. Length of the edentulous space.
D. All of the above.

4. Which one of the following can be assessed using a bitewing radiograph?

A. Amount of plaque retention.
B. Location and extent of proximal caries.
C. Bone level.
D. A and B.
E. B and C.

5. Which one of the following can be assessed using a periapical radiograph?

A. Amount of plaque retention.
B. Chronic apical periodontitis.
C. Tooth mobility.
D. Length and configuration of roots.
E. B and D.

6. Which one of the following investigations is not necessary for routine assessment of a patient for fixed prosthodontic treatment?

A. Full periodontal charting.
B. TMJ evaluation.
C. Extraoral examination.
D. Diagnostic casts.
E. Radiographs.

7. Habits like clenching may result in fatigue, muscle pain and hypertrophy of the:

A. Buccinator.
B. Masseter.
C. Sternocleidomastoid.
D. Lateral pterygoid.
E. Trapezius.

ANS: 1C 2E 3D 4E 5E 6A 7B

EXTENDED MATCHING QUESTIONS

1. Theme: Diagnosis.

A. Attached gingiva.
B. Diagnostic wax up.
C. Proximal caries.
D. Dietary habit.
E. Regurgitation.
F. Root configuration.
G. Temporomandibular joint.

Using a letter from A to G, choose the most appropriate response from the list above that best matches each of the following descriptions numbered 1 to 5 below. You may use each response A to G, once only or not at all.

1. Checked using the periapical radiograph.
2. Assessed using the intraoral examination.
3. Revealed during patients history.
4. Evaluated during the extraoral examination.
5. Viewed with the help of horizontal bitewing radiograph.

Description	Response
1	F
2	A
3	E
4	G
5	C

2. Theme : Components of a fixed prosthesis.

A. Abutment.
B. Connector.
C. Pontic.
D. Retainer.
E. Non-rigid connector.
F. Edentulous ridge.
G. Crown.

Using a letter from A to G, choose the most appropriate response from the list above that best matches each of the following descriptions numbered 1 to 5 below. You may use each response A to G, once only or not at all.

1. A component of a bridge that permits limited movement.
2. An artificial tooth on a bridge that replaces a missing natural tooth and restores its form and function.

3. A component of a bridge which is cemented to the abutment(s).
4. The term used to describe the tooth or teeth to which a bridge is cemented.
5. A component of a bridge which joins the retainer to the pontic.

Description	Response
1	E
2	C
3	D
4	A
5	B

SHORT ANSWER QUESTIONS

1. a. List four possible signs and symptoms of a TMJ disorder. (2 marks)

- Clicking
- Crepitation
- Pain and limitation on opening, closing and moving laterally
- Pain of palpation of the joints and masticatory muscles as the patient opens and closes
- Deviation of mandible when open and close
- Headache.

b. Which are the six muscles that should be examined when a TMJ disorder is suspected? (3 marks)

- Masseter
- Temporalis
- Medial pterygoid
- Lateral pterygoid
- Trapezius
- Sternocleidomastoid.

2. a. List six indications for diagnostic casts in planning for any prosthesis in a dentate patient? (3 marks)

- To study occlusion
- Length and curvature of edentulous spaces
- Occlusogingival dimensions
- Orientation of abutment teeth
- Wear facets
- Positioning and super-eruption of opposing teeth
- Prepare diagnostic wax-up.

b. List four indications for taking radiographs in planning for any prosthesis in a dentate patient? (2 marks)

- Caries: Interproximal and under the existing restorations
- Periapical lesions
- Quality of root canal treatments
- Supporting bone level
- Crown/root ratio
- Length, configuration and direction of roots
- PDL width (traumatic occlusion)
- Retained root and any other pathology.

FUNDAMENTALS OF OCCLUSION

MULTIPLE CHOICE QUESTIONS

1. The position of the condyle in centric relation is:

A. Anteriorly, superiorly braced position along the articular eminence of the glenoid fossa.
B. Anteriorly, inferiorly braced position along the articular eminence of the glenoid fossa.
C. Posteriorly, superiorly braced position along the articular eminence of the glenoid fossa.
D. Posteriorly, inferiorly braced position along the articular eminence of the glenoid fossa.
E. Posteriorly, medially braced position along the articular eminence of the glenoid fossa.

2. The mandible makes a purely rotational opening and closing movement around the:

A. Vertical axis.
B. Sagittal axis.
C. Horizontal axis.
D. Frontal axis.
E. Orientation axis.

3. A purely hinge movement of condyles within the range of 10 – 13 degree produces a separation of .....

A. 20 – 25 mm.
B. 10 – 15 mm.
C. 20 – 25 cm.
D. 10 – 15 cm.

4. A shield-shaped pattern has all distinct movement components except the:

A. Left lateral superior border
B. Left lateral opening border
C. Right lateral Inferior border
D. Right lateral opening border.

5. When the mandible moves laterally the nonworking side condyle will arc....

A. Forward and medially.
B. Laterally and posteriorly.
C. Forward and laterally.
D. Medially and posteriorly.
E. Laterally and anteriorly.

6. When the mandible moves laterally the working side condyle will arc:

A. Forward and medially.
B. Laterally and posteriorly.

C. Forward and laterally.
D. Medially and posteriorly.
E. Laterally and anteriorly.

7. The dentist has control over which one of the following determinants of mandibular movement?

A. Anterior determinants.
B. Posterior determinants and temporomandibular joints.
C. Anterior determinants and temporomandibular joints.
D. Posterior determinants.
E. Temporomandibular joints.

8. The working occlusal interference is more likely to occur on:

A. Mesial-facing cusp inclines of maxilla.
B. Lingual-facing cusp inclines of maxilla.
C. Buccal-facing cusp inclines of maxilla.
D. Distal-facing cusp inclines of mandible.
E. Mesial-facing cusp inclines of mandible.

9. The centric occlusal interferences are more likely to occur on:

A. Buccal-facing inclines of mandibular molars.
B. Mesial-facing inclines of maxillary molars.
C. Mesial-facing inclines of mandibular molars.
D. Distal-facing inclines of maxillary molars.
E. Lingual-facing inclines of mandibular molars.

10. Protrusive occlusal interferences are more likely to occur on:

A. Buccal-facing inclines of mandibular molars.
B. Mesial-facing inclines of maxillary molars.
C. Distal-facing inclines of mandibular molars.
D. Distal-facing inclines of maxillary molars.
E. Lingual-facing inclines of mandibular molars.

11. The nonworking occlusal interference is more likely to occur on:

A. Mesial-facing cusp inclines of maxilla.
B. Lingual-facing cusp inclines of maxilla.
C. Buccal -facing cusp inclines of maxilla.
D. Distal-facing cusp inclines of mandible.
E. Mesial-facing cusp inclines of mandible.

12. Mutually protected occlusion is otherwise called as:

A. Group function.
B. Incisor occlusion.
C. Molar occlusion.
D. Organic occlusion.

13. The concept of occlusion which is used in complete denture construction is:

A. Unilateral balanced occlusion.
B. Mutually protected occlusion.
C. Canine protected occlusion.
D. Bilateral balanced occlusion.

14. Mutually protected occlusion cannot be observed in patients with:

A. Class I occlusion.
B. Reverse occlusion.
C. Class I malocclusion.
D. Overjet occlusion.

15. During protrusive movement if the protrusive inclination is steep then the corresponding cuspal height is:

A. Shallow.
B. Flat.
C. Steep.
D. Undermined.

16. During immediate lateral translation movement if the translation is minimal then the corresponding cuspal height is:

A. Shallow.
B. Flat.
C. Steep.
D. Undermined.

17. If the vertical overlap is greater, then the posterior cuspal height is:

A. Shorter.
B. Flat.
C. Longer.
D. Undermined.

ANS : 1A 2C 3A 4C 5A 6B 7A 8B 9B 10D 11C 12D 13D 14B 15C 16C 17C

SHORT ANSWER QUESTIONS

1. Name the determinants of mandibular movements. [2 marks]

- Posteriorly the right and left temporomandibular joints
- Anteriorly the teeth
- Overall the neuromuscular system.

2. Describe the different types of occlusal interferences. [5 marks]

- Centric: Maxillary mesial-facing cusp inclines and mandibular distal-facing cusp inclines
- Working: Maxillary lingual-facing cusp inclines and mandibular buccal-facing cusp inclines
- Nonworking: Maxillary buccal -facing cusp inclines and mandibular lingual-facing cusp inclines
- Protrusive: Maxillary distal-facing cusp inclines and mandibular mesial-facing cusp inclines.

3. Describe the Okeson criteria for normal occlusion. [5 marks]

- In closure, the condyles are in the most superoanterior position against the discs on the posterior slopes of the eminences of the glenoid fossae. The posterior teeth are in solid and even contact, and the anterior teeth are in slightly lighter contact
- Occlusal forces are in the long axis of the teeth
- In lateral excursions of the mandible, working-side contacts (preferably on the canines) disocclude or separate the nonworking teeth instantly
- In protrusive excursions, anterior tooth contacts will disocclude the posterior teeth
- In an upright posture, posterior teeth contact more heavily than do anterior teeth.

4. Discuss in detail the three recognized concepts of occlusion. [5 marks]

Bilateral Balanced Occlusion

- Based on the work of von Spee and Monson
- Dictates that a maximum number of teeth should contact in all excursive positions of the mandible
- Useful in complete denture construction, in which contact on the nonworking side is important to prevent tipping of the denture.

Unilateral Balanced Occlusion

- Based on the work of Schuyler
- Known as group function, distributes the occlusal load
- Eliminate all tooth contact on the nonworking side, prevents those teeth from being subjected to the destructive, obliquely directed forces found in nonworking interferences
- Saves the centric holding cusps and maintain the occlusion.

Mutually-protected Occlusion

- Based on the work of D'Amico, Stuart, Stallard, Stuart, Lucia
- Known as canine-protected occlusion or "organic" occlusion
- The anterior teeth bear the entire load and the posterior teeth are disoccluded in any excursive position of the mandible
- As a result of the anterior teeth protecting the posterior teeth in all mandibular excursions and the posterior teeth protecting the anterior teeth at the intercuspal position, this type of occlusion came to be known as a mutually-protected occlusion.

ARTICULATION AND ARTICULATORS

MULTIPLE CHOICE QUESTIONS

1. Choose the correct ones

a. In an arcon articulator the condylar elements are placed on the lower member of the articulator.

b. In an arcon articulator, the condylar inclination becomes less steep when the teeth are separated or closed.

c. The most accurate method of locating the hinge axis is by trial and error method by McCollum and Stuart in 1921.

d. Arcon articulators are the most commonly used articulators for dentures.

e. Thickness of the interocclusal records is—3.0–5.0 mm.

f. The precise recording of the condylar paths is done by interocclusal recordings.

A. a, b and e.
B. a, c and e.
C. c, d and f.
D. b, d and f.

ANS : 1B

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Exam Preparatory Manual for Undergraduates

FIXED PARTIAL DENTURES

Salient Features

- Has a compilation of last ten-years question papers from all major universities in India
- A quick revision tool for undergraduate and postgraduate students
- Recent advances have been added as a chapter with references
- Contain MCQs, extended matching questions which are useful in viva
- An in-depth section on implantology
- This review book presents essays and short notes with answers helping the student to revise the topics in fixed partial denture and implantology with ease
- References and suggested reading is mentioned along with text matter.



Lovely M MDS DNB (Prost) PhD is working as a Professor in Department of Prosthodontics at Sree Mookambika Dental College, Kulasekharam, Tamil Nadu, India. She has vast experience in teaching and clinical practice, and guiding both undergraduates and postgraduates.

After completing her PhD in maxillofacial implants, she has carried out various research projects with Biomedical Technology Wing, Sree Chitra Tirunal Institute for Medical Science and Technology, Thiruvananthapuram, Kerala, India, and the Department of Maxillofacial Prosthetics, Graduate School, Tokyo Medical and Dental University, Japan.

Being an academician and practicing dentist, she is keen on benefiting the dental students by bringing out teaching-friendly aids, reducing the load on students and enabling them to perform better in examinations.

She has authored other review books which include *Review in Removable Partial Denture* and *Review in Fixed Partial Denture* also. Apart from being the author of review books in prosthodontics, she is also the author of *Pandora's Box of 101 Sins*.

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