

Study Guide Crown & Bridge
Department of Operative Dentistry



Study Guide
CROWN & BRIDGE

For BDS Fourth Year



Study Guide Crown & Bridge

Department of Operative Dentistry

MESSAGE FROM THE PRINCIPAL

AVICENNA DENTAL COLLEGE



Prof. Dr. Sohail Abbas Khan

{MDS, Dip Op (Hons) BDS}

It is a matter of immense honour and privilege as the first Principal of Avicenna Dental College to welcome you to prospectively one of the finest dental institutes in the private sector of Pakistan. Avicenna Dental College is a private dental college, which aims to provide the finest dental education to dental undergraduate student in accordance with the latest trends in Medical Education, and to develop them to practice dentistry in the 21st century.

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While educating dental students to become licensed, empathetic and competent professionals, Avicenna Dental College endeavours to educate students in a supportive environment in which they provide dental care for a diverse populace. In the times to come, we wish to transform our graduates into unfeigned teachers, researchers and consultants by starting post-graduation programs as well.

Avicenna Dental College aims to achieve an enterprising curriculum integrating the basic sciences with clinical experience while utilizing modern technological modalities.

In addition to the production of outstanding oral health professionals, we at Avicenna Dental College recognize our responsibility as a private dental institution to the citizens of the country in making the provision of oral the provision of oral health care available to those who are deprived of ready access.

I feel proud to lead this dental establishment such an inspiring time and hope all of you at Avicenna Dental College will share this pride and play your respective roles in materializing the dream of making this institution the premier dental educator in Pakistan.

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MESSAGE FROM THE HOD, OPERATIVE DENTISTRY

AVICENNA DENTAL COLLEGE



Prof. Dr. Sohail Abbas Khan
{MDS, Dip Op (Hons) BDS}

The Department of Operative Dentistry of Avicenna Medical and Dental College is one of the largest departments of faculty of Dentistry. It provides an important role in the College of Dentistry establishing the foundational concepts of dentistry to the pre-doctoral dental students in caries diagnosis, prevention, repair and restorative techniques. The primary focus of the Department of Operative Dentistry's to provide the knowledge, technical skills, critical thinking and judgment for the diagnosis, prevention, and management of dental caries, non-carious dental defects (attrition, abrasion, erosion, abfraction, developmental abnormalities, discoloration, and trauma), and elective esthetic smile enhancements. The department is responsible for four

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clinics namely restorative, endodontic, crown and bridge and pedodontics. The department also carries out the preclinical training/ lectures of 2-year BDS in restorative dentistry and clinical training /lectures of 3'd year BDS and final year BDS in operative dentistry.

All full-time faculty in the Department of Operative Dentistry have advance training in Operative Dentistry faculty is recognized for their teaching, research and clinical expertise. In addition, there are excellent clinical facilities for the development of clinical techniques and for clinical research. We also have Phantom Head lab for preclinical restorative techniques These laboratories and clinical areas are routinely used by the faculty and the graduate students as well as by a selected number of pre-doctoral students.

PHANTOM HEAD LAB

In Avicenna Dental College one unique provision is the phantom head laboratory which plays a pivotal role in gradually introducing dental students to the structure of human anatomy with special focus on teeth, orientation of a dental workstation as well as patient and doctor posture and positioning. Phantom Heads are sophisticated, life- like manikins which allow rehearsal of dental procedures. With the help of these models, students can practice techniques at an early stage of their training without putting patient safety at risk. All Faculty designated for the department is fully trained and equipped to train and demonstrate to students everything required to restore, preserve a tooth without putting real patients' teeth at risk.

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| Sr # | Contents | Learning Objectives |
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| 1 | Indications and Contraindications | At the end of the session students should be able to know the indications and contraindications of Crowns |
| 2 | Types of crowns | • At the end of the session students should be able to classify the types of crowns according to the materials used, position and areas of tooth covered by the crowns |
| 3 | Designing tooth preparation | At the end of the session students should be able to know the objectives and principles of crown preparation, types of margins and dimensions of a tooth to be prepared |

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| 4 | History taking and treatment planning | <p>At the end of the session students should be able to describe the sequence of selection of crowns, History and Examination Decisions to be made</p> <ol style="list-style-type: none">1.Keep the tooth or extract2.If tooth kept—crown or restoration3.If crowned-preparatory treatment necessary |
| 5 | Steps for making of crowns | <p>At the end of the session students should be able to describe factors which are to be considered before clinical tooth preparation is started:</p> <ul style="list-style-type: none">■ Study casts■ Photographs■ Trial preparation■ Appearance■ The final impression■ The temporary crown |

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| 6 | Introduction to bridges | <p>At the end of the session students should be able to describe:</p> <ol style="list-style-type: none"> 1. General terminologies used 2. General considerations 3. Co-relation with orthodontics 4. Dimensions <p style="text-align: right;">• Assessment and evaluation of abutments</p> |
| 7 | Types of bridge | <p>At the end of the session students should be able to describe:</p> <ol style="list-style-type: none"> 1. Types of bridge 2. Advantages <p style="text-align: right;">Disadvantages</p> |
| 8 | Components of bridge | <p>At the end of the session students should be able to describe components of a bridge, their definitions and considerations:</p> <ol style="list-style-type: none"> 1. Abutment 2. Retainer 3. Pontic 4. Span 5. Pier 6. Unit <p style="text-align: right;">Connector</p> |

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| 9 | Crown Lengthening | At the end of the session students should be able to define crown lengthening, concerns associated with it and technique |
| 10 | Post and core crowns | At the end of the session students should be able to describe: <ol style="list-style-type: none">1. Definitions2. Classification3. Materials4. Advantages, disadvantages5. Ideal properties6. Principles7. Cements used <p style="text-align: right;">Procedures</p> |
| 11 | Impression materials | At the end of the session students should be able to describe: <ol style="list-style-type: none">1. Requirements2. How to choose3. Materials used4. Classification5. Advantages/Disadvantages |

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| | | Impression techniques |
| 12 | Provisional restorations | At the end of the session students should be able to describe: 1. Definition 2. Requirements 3. Materials 4. Technique Types |
| 13 | Failure and repair | At the end of the session students should be able to describe the reasons associated with failure of a crown/bridge |

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