

**DR.M.G.R EDUCATIONAL & RESEARCH INSTITUTE UNIVERSITY  
DEPARTMENT OF PROSTHODONTICS AND CROWN & BRIDGE**

|  |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
|--|--|-----------------------------------|--------------------------------|--------------|-------------------|----------------|---------------------|-------------------------------|-------------|-------------|-------------|-------------|
| <b>Subject Code:</b>   | <b>Subject Name: Prosthodontics And Crown &amp; Bridge</b>   |                                   |                                |              | <b>T / L/ ETL</b> | <b>L</b>       | <b>T/ S.Lr</b>      | <b>P/ R</b>                   |             |             |             |             |
|  | Prerequisite:  |                                   |                                |              | T                 |                |                     |                               |             |             |             |             |
| L : Lecture T : Tutorial SLr : Supervised Learning P : Project R : Research C: Credits<br>T/L/ETL : Theory/Lab/Embedded Theory and Lab.  |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>OBJECTIVE:</b>  |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <input type="checkbox"/> Able to understand and use various dental materials<br><input type="checkbox"/> Competent to carry out treatment of conventional complete and partial removable dentures and fabricate fixed partial dentures<br><input type="checkbox"/> Able to carry out treatment of routine prosthodontic procedures.<br><input type="checkbox"/> Familiar with the concept of osseointegration and the value of implant-supported Prosthodontic procedures. |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>COURSE OUTCOMES (COs) : ( 3- 5)</b>   |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>CO1</b>   | To Acquire confidence and knowledge by clinical practice with sufficient numbers of patients requiring tooth and tooth surface restorations along with management of oro-facial defects.   |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>CO2</b>   | To Attain high level proficient in restoration, rehabilitation & maintenance of the dentition to increase the life span of teeth   |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>CO3</b>   | To gain Adequate knowledge of the constitution, biological function and behavior of persons in health and sickness as well as the influence of the natural and social environment on the state of health in so far as it affect dentistry. |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>CO4</b>   | To Develop better interpersonal, managerial and problem solving skills   |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>CO5</b>   | To Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life   |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>Mapping of Course Outcomes with Program Outcomes (POs)</b>  |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>Cos/Pos</b>   | <b>PO1</b>   | <b>PO2</b>                        | <b>PO3</b>                     | <b>PO4</b>   | <b>PO5</b>        | <b>PO6</b>     | <b>PO7</b>          | <b>PO8</b>                    | <b>PO9</b>  | <b>PO10</b> | <b>PO11</b> | <b>PO12</b> |
| CO1  | H  | H                                 | M                              | M            | M                 | H              | H                   | H                             | M           | H           | H           | M           |
| CO2  | H  | H                                 | M                              | M            | M                 | H              | H                   | H                             | M           | H           | H           | M           |
| CO3  | H  | H                                 | M                              | M            | M                 | H              | H                   | H                             | M           | H           | H           | M           |
| CO4  | H  | H                                 | M                              | M            | M                 | H              | H                   | H                             | M           | H           | H           | M           |
| CO5  | H  | H                                 | M                              | M            | M                 | H              | H                   | H                             | M           | H           | H           | M           |
| <b>COs /PSOs</b>   | <b>PSO1</b>  | <b>PSO2</b>                       |                                | <b>PSO3</b>  |                   | <b>PSO4</b>    |                     |                               |             |             |             |             |
| CO1  | H  | H                                 |                                | L            |                   | M              |                     |                               |             |             |             |             |
| CO2  | H  | H                                 |                                | L            |                   | M              |                     |                               |             |             |             |             |
| CO3  | H  | H                                 |                                | L            |                   | M              |                     |                               |             |             |             |             |
| CO4  | H  | H                                 |                                | L            |                   | M              |                     |                               |             |             |             |             |
| CO5  | H  | H                                 |                                | L            |                   | M              |                     |                               |             |             |             |             |
| <b>H/M/L indicates Strength of Correlation H- High, M- Medium, L-Low</b>   |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |
| <b>Category</b>  | Basic Sciences   | Medical and Allied Health Science | Humanities and Social Sciences | Program Core | Program Electives | Open Electives | Practical / Project | Internships / Technical Skill | Soft Skills |             |             |             |
|  |  |                                   |                                | ✓            |                   |                |                     |                               |             |             |             |             |
| Approval   |  |                                   |                                |              |                   |                |                     |                               |             |             |             |             |

Revised B.D.S regulation 2007 approved by dental council of India.

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**UNIT 1**-Complete Dentures-Applied Anatomy and Physiology-Introduction-Biomechanics of the edentulous state-Residual ridge resorption.

**UNIT 2**-Communicating with the patient-Understanding the patients-Mental attitude-Instructing the patient.

**UNIT 3**-Diagnosis and treatment planning for patients-With some teeth remaining-With no teeth remaining-Systemic status-Local factor-The geriatric patient-Diagnostic procedures.

**UNIT 4**- Articulators- discussion

**UNIT 5**- Improving the patient's denture foundation and ridge relation -an overview-Pre-operative examination-Initial hard tissue & soft tissue procedure-Secondary hard & soft tissue procedure-Implant procedure-Congenital deformities-Postoperative procedure.

**UNIT6**-Principles of Retention, Support and Stability.

**UNIT7**- Impressions – detail-Muscles of facial expression- Biologic considerations for maxillary -mandibular impression including anatomy-landmark and their interpretation-Impression objectives-Impression material- Impression techniques-Maxillary and mandibular impression procedures-Preliminary impressions- Final impressions- Laboratory procedures involved with impression making.

**UNIT8**-Record bases and occlusion rims- in detail- Materials & techniques-Useful guidelines and ideal parameters-Recording and transferring bases and occlusal rims.

**UNIT9**-Biological consideration in jaw relation & jaw movements - craniomandibular relations-Mandibular movements-Maxillo -mandibular relation including vertical and horizontal jaw relations-Concept of occlusion- discuss in brief.

**UNIT10**- Relating the patient to the articulator- Face bow types & uses– discuss in brief-Face bow transfer procedure - discuss in brief.

**UNIT11**-Recording maxillo mandibular relation-Vertical relations-Centric relation records-Eccentric relation records-Lateral relation records.

**UNIT12**- Tooth selection and arrangement-Anterior teeth-Posterior teeth-Esthetic and functional harmony.

**UNIT13**- Relating inclination of teeth to concept of occlusion- in brief-Neurocentric concept-Balanced occlusal concept.

**UNIT14**-Trial dentures.

**UNIT15**-Laboratory procedures-Wax contouring-Investing of dentures-Preparing of mold-Preparing & packing acrylic resin-Processing of dentures-Recovery of dentures-Lab remount procedures-Recovering the complete denture from the cast-Finishing and polishing the complete denture-Plaster cast for clinical denture remount procedure.

**UNIT16**-Denture insertion-Insertion procedures-Clinical errors-Correcting occlusal disharmony-Selective grinding procedures.

**UNIT 17**-Treating problems with associated denture use – discuss in brief (tabulation/flow-chart form).

**UNIT18**- Treating abused tissues - discuss in brief.

**UNIT19**- Relining and rebasing of dentures- discuss in brief.

**UNIT 20**-Immediate complete dentures construction procedure- discuss in brief.

**UNIT21**- The single complete denture- discuss in brief.

**UNIT22**- Overdentures denture- discuss in brief.

**UNIT23**- Dental implants in complete denture - discuss in brief.

**UNIT 24**-Removable Flexible Dentures-Introduction-Terminologies and scope-Classification- Examination, Diagnosis & Treatment planning & evaluation of diagnostic data-Components of a removable partial denture- Major connectors- minor connectors-Rest and rest seats-Components of a Removable Partial Denture-Direct retainers-Indirect retainers-Tooth replacement-Principles of Removable Partial Denture Design-Survey and design – in brief-Mouth preparation and master cast-Impression materials and procedures for removable partial dentures-Preliminary jaw relation and esthetic try-in for some anterior replacement teeth-Laboratory procedures for framework construction-in brief-Fitting the framework - in brief-Try-in of the partial denture - in brief-Completion of the partial denture - in brief-Inserting the Removable Partial Denture - in brief-Postinsertion observations- Temporary Acrylic Partial Dentures-Immediate Removable Partial Denture-Removable Partial Dentures opposing Complete denture.

**UNIT 25**-Fixed Partial Dentures-Introduction-Fundamentals of occlusion – in brief-Articulators – in brief-Treatment planning for single tooth restorations-Treatment planning for the replacement of missing teeth including selection and choice-abutment teeth-Fixed partial denture configurations-Principles of tooth preparations-Preparations for full veneer crowns – in detail-Preparations for partial veneer crowns – in brief-Provisional Restorations-Fluid Control and Soft Tissue Management-Impressions-Working Casts and Dies- Wax Patterns-Pontics and Edentulous Ridges-Esthetic Consideration-Finishing and Cementation-Solder Joints and Other Connectors-All - Ceramic Restorations- Metal - Ceramic Restorations-Preparations of intra-coronal restorations- Preparations for extensively damaged teeth-Preparations for periodontally weakened teeth-The Functionally Generated Path Technique-Investing and Casting-Resin - Bonded Fixed Partial Denture

**TOTAL NUMBER OF HOURS: LECTURE-135,PRACTICAL-300,CLINICAL-370**

**RECOMMENDED BOOKS:**

1. Syllabus of Complete denture by - Charles M. Heartwell Jr. and Arthur O. Rahn.
2. Boucher's "Prosthodontic treatment for edentulous patients"
3. Essentials of complete denture prosthodontics by – Sheldon Winkler.
4. Maxillofacial prosthetics by – Willam R.Laney.
5. McCracken's Removable partial prosthodontics
6. Removable partial prosthodontics by – Ernest L. Miller and Joseph E. Grasso.

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