**Khyber Medical University – Peshawar**

**Chemistry of Dental Materials (CDM)**

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| **S.No** | **Course content**  | **SEQs**  | **MCQs** |
|  | * Science of Dental Materials
* Basic terminologies
* Properties used to Characterize Materials
 | 1 | 3 |
|  | * Impression Materials: Classification and Requirements
* Non-elastic Impression Materials
* Elastic Impression Materials: Hydrocolloids
* Elastic Impression Materials: Synthetic Elastomers
 | 1 | 5 |
|  | * Gypsum Products for Dental Casts / Model or die materials
* Dental Waxes
 | 1 | 3+2 |
|  | * Synthetic Polymers
* Denture Base Polymers
* Denture Lining Materials
* Artificial Teeth
* Temporary Crown and Bridge Resins
 | 1 | 6 |
|  | * Investments / Refractory Die materials and Casting
 | 1 | 3 |
|  | * Metals and Alloys
* Alloys of Noble Metal
* Base Metal Casting Alloys
* Soldering, Brazing, Welding
* Fluxes, Anti-fluxes
* Steel and Wrought Alloys
* Dental Implants
* Finishing and Polishing materials
 | 2  | 9 |
|  | * Ceramics and Porcelain Fused to Metal (PFM)
 | 1 | 2 |
|  | * Requirements of Direct Filling Materials and Historical Perspectives
* Dental Amalgam
* Pure Gold
 | 1 | 3 |
|  | * Resin-based Filling Materials
* Adhesive Restorative Materials:
* Bonding of Resin-based Materials
 | 1 | 2 |
|  | * Requirements of Dental Cements for Lining, Base and Luting Applications
* Cements Based on Phosphoric Acid
* Cements Based on Organometallic Chelate Compounds
* Polycarboxylates, Glass Ionomers and Resin-modified Glass Ionomers for Luting and Lining
* Glass Ionomer Restorative Materials (Polyalkenoates)
* Resin-modified Glass Ionomers and Related Materials
* Preventive materials
 | 1 | 5 |
|  | * Endodontic Materials / Miscellaneous
 | 1 | 2 |
|  **Total**  | **12** | **45** |