**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** |