

**Second Year BDS Degree Regular/Supplementary Examinations**  
**January 2025**

**Dental Materials**

**(2016 Scheme)**

**Time: 3 hrs**

**Max Marks: 70**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw Diagrams wherever necessary*
- *Write section A and section B in separate answer books (32 pages). Do not mix up questions from section A and section B*

**Q P Code: 214002**

**Section A – Prosthodontics**

**Marks: 35**

**Essay**

**(10)**

1. Classify Impression materials and write briefly on their ideal requirements. Write in detail on composition, types, manipulation and uses of Impression compound.

**(2+2+2+2+2)**

**Short Notes**

**(2x5=10)**

2. Methods of strengthening ceramics.
3. Various dental casting defects.

**Answer Briefly**

**(5x3=15)**

4. Different curing cycles of heat cure acrylic.
5. Osseo integration and dental implant biomaterials
6. Cobalt chromium alloys
7. Accelerators and retarders in gypsum.
8. Composition of Alginate

**Q P Code: 215002**

**Section B – Conservative Dentistry**

**Marks: 35**

**Essay**

**(10)**

1. Define dental amalgam. Classify alloys used in dental amalgam. Discuss briefly the methods of dispensing and trituration of dental amalgam

**(1+3+2+4)**

**Short Notes**

**(2x5=10)**

2. Gold foil
3. Classification of cast metal alloys

**Answer Briefly**

**(5x3=15)**

4. Modulus of elasticity
5. Cold welding
6. Tarnish
7. Acid-etching
8. CAD-CAM

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