

**Second Year BDS Degree Supplementary Examinations July 2019**

**Dental Materials  
(2010 Scheme)**

**Time: 3 hrs**

**Max marks: 100**

- *Answer all questions*
- *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: 204002 Section A – Prosthodontics**

**Marks: 50**

**Essay (14)**

1. Classify gypsum products. Describe in detail about setting expansion, hygroscopic setting expansion and factors affecting each. (2+12)

**Short essays (2x8=16)**

2. Composition and setting reaction of phosphate bonded investment materials.
3. Irreversible hydrocolloid impression material.

**Short notes (5x4=20)**

4. Stainless steel
5. Die- electroforming
6. Components of dental implants
7. Rouge
8. Chemical stages of polymerization of heat cure acrylic resins.

**Q P Code: 205002 Section B – Conservative Dentistry**

**Marks: 50**

**Essay (14)**

1. Classify dental amalgam alloys. Discuss the composition, setting reaction and advantages of high copper alloys. (2+2+6+4)

**Short essays (2x8=16)**

2. Classify direct filling gold. Discuss the techniques for removal of surface impurities (3+5)
3. Define corrosion, enumerate causes of corrosion and methods to protect against it. (2+6)

**Short notes (5x4=20)**

4. Hybrid composites
5. Setting reaction of glass ionomer cements.
6. Rake angle and clearance angle
7. Micro leakage
8. Acid-etching