

**Second Year BDS Degree Examinations – July 2016****DENTAL MATERIALS****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 investment materials. Describe the composition of phosphate bonded investment material and describe how will you compensate for casting shrinkage of dental casting alloy (3+3+8=14)

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

2. Mention the composition of heat cure denture base resin. Describe briefly about the role of each ingredient and describe the properties of heat cure resin. (3+5=8)
3. Classify impression materials. Write the composition, setting reaction and different types of addition silicone. (3+5=8)

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

4. Imbibition and syneresis
5. Modulus of elasticity
6. Die materials
7. Denture reliners
8. Incomplete casting

Q P Code: 205002 Section B – Conservative Dentistry**Marks: 50****Essay****(14)**

1. Classify dental cements. Discuss the types, setting reaction, advantages, disadvantages and modification of zinc oxide eugenol cements (3+3+3+5=14)

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

2. Types of dental amalgam alloys and amalgamation reaction (4+4=8)
3. Discuss micro filled composite resins

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

4. Acid etching
5. Glass ionomer cements
6. Mercury hygiene procedures
7. Inlay wax
8. Sprues
