

**Second Year BDS Degree Supplementary Examinations August 2021**  
**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. Define impression materials and classify them. Describe in detail about composition, manipulation, properties and uses of irreversible hydrocolloid. (2+3+5)

**Short Notes**

**(2x5=10)**

2. Different types of setting reaction of gypsum products. Describe in detail the hygroscopic setting expansion (2+3)
3. Types, composition and uses of polymethyl methacrylate resins in dentistry. (1+2+2)

**Answer Briefly**

**(5x3=15)**

4. Accelerators and retarders used with gypsum products
5. Composition and uses of impression plaster
6. Casting ring liners
7. Abrasives used in prosthodontics
8. Gillmore needle test

**Q P Code: 215002**

**Section B – Conservative Dentistry**

**Marks: 35**

**Essay**

**(10)**

1. What are glass ionomer cements. Describe the composition of type II glass ionomer cement, its retention to dentin and biological properties. Mention the various uses of the glass ionomer cements. (1+5+4)

**Short Notes**

**(2x5=10)**

2. Acid etching and mechanism of retention of resin restoration.
3. Mercury toxicity and mercury hygiene in dental operatory

**Answer Briefly**

**(5x3=15)**

4. Enumerate methods to compensate casting shrinkage
5. Cavity varnish
6. What is galvanic corrosion. Its dental importance and prevention.
7. Electralloy.
8. High copper amalgam

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