

**XW-102**

**D/ME-21301**  
**Second Year, B.D.S. Examination**  
**January-2015**  
**Dental Materials**

**Faculty Code : D/ME**  
**Subject Code : 21301**

**Time : 3 Hours]**

**[Total Marks : 70**

- Instructions :** (1) Write each section in separate main answer books.  
(2) Write legibly and draw diagrams wherever necessary.  
(3) Figures to the right indicate full marks.

**SECTION – I**

1. Classify impression materials. Write in detail about irreversible hydrocolloid impression material. **10**
  
2. Describe composition, uses, properties, advantages and disadvantages of dental porcelain. **10**

**OR**

Which are various casting defects ? Describe causes and prevention of each.

3. Write short notes on : (Any 3) **15**
  - (1) Blue inlay wax.
  - (2) Soldering and welding.
  - (3) Proportional limit of a dental material.
  - (4) Hygroscopic setting expansion.

## **SECTION – II**

4. Discuss types, composition, properties and uses of glass ionomer cement. **10**
5. Discuss the criteria of an ideal restorative material. Describe composition and role of ingredients of silver amalgam in detail. **10**
6. Write Short notes on : (Any 3) **15**
- (1) Properties of composite resins.
  - (2) Indications and contraindications of calcium hydroxide cement.
  - (3) Karat and fineness of gold alloy.
  - (4) Cavity varnish.
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