



**PAP-21301**

Seat No. \_\_\_\_\_

**Second Year B. D. S. Examination**

**August - 2020**

**Dental Materials**

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) Write each section in separate answer book.  
(2) Draw figure wherever necessary.  
(3) Figures on right indicate marks.  
(4) Attend all the questions.

**SECTION - I**

- 1** What are Casting alloys. Classify different casting alloys used in dentistry. Elaborate on Casting technique with diagram. **10**

**OR**

Classify acrylic resins. Write a note on composition, polymerization and porosities in Heat cure acrylic resin.

- 2** Answer in brief : (Any Five) **10**
- (a) Curing cycles
  - (b) Gillmore Needles
  - (c) Ni-Ti wire
  - (d) Photoinitiators
  - (e) KHN
  - (f) Rake angle
- 3** Write Short Notes : (Any Five) **15**
- (a) Metal-ceramic bonding
  - (b) Polishing agents
  - (c) Die stone
  - (d) Dental Varnish
  - (e) Fillers in composite resins
  - (f) Composition of GIC

## SECTION - II

- 4 Classify amalgam. Describe in detail its properties, uses and different types of failures **10**

**OR**

Discuss in detail about Tarnish and Corrosion

- 5 Answer : (Any **Two**) **10**
- (a) Dental Waxes
  - (b) Dental Solder
  - (c) GIC
- 6 Answer in brief : (Any **Five**) **15**
- (a) Hygroscopic expansion
  - (b) Modifications of ZnOE cement
  - (c) Hue, Value and Chroma
  - (d) Stress- strain curve
  - (e) Tissue conditioners
  - (f) Chromatic alginate
-