



DCB-21301

Seat No. _____

Second Year B. D. S. Examination

July - 2022

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) Answer all the questions.

SECTION - I

- 1** Classify Impression materials. What are hydrocolloid materials? Compare and contrast different hydrocolloid materials in detail. **10**

OR

Classify various Obturating materials, Discuss Gutta percha in detail.

- 2** Answer in Brief : (Any **Five**) **10**
- (a) Smear layer
 - (b) Chelation
 - (c) Abrasive agents
 - (d) KHN
 - (e) Uses of Zn phosphate cements
 - (f) Sprue

- 3** Write Short Notes : (Any **Five**) **15**
- (a) Brush heap structure
 - (b) Factors affecting setting time
 - (c) Bonding agents
 - (d) Trituration
 - (e) Porosities in casting
 - (f) Denture adhesives

SECTION-II

- 4 Classify Dental Cements. Write in detail about composition, 10
properties of GIC. Explain Bilayered technique.

OR

Classify composite resins. Write its composition and
manipulation in detail.

- 5 Write Answer : (Any Two) 10

- (a) Sintering
- (b) Polyether impression material
- (c) MTA

- 6 Answer in Brief : (Any Five) 15

- (a) Compressive strength
 - (b) Divestments
 - (c) Implant biomaterials
 - (d) Gold alloys
 - (e) Properties of an Impression paste
 - (f) Disinfectants used in dentistry
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