



HAI-21301

Seat No. _____

Second Year B. D. S. Examination

June / July – 2017

Dental Materials

Time : 3 Hours]

[Total Marks : 70

- Instructions :** (1) Write each section in separate answer book .
(2) Draw figures whenever necessary.
(3) Figure on right indicate marks.
(4) Attempt all the questions.

SECTION – I

- 1 Full Question : 10**
What are Dental Ceramics? Give the classification, uses and methods of strengthening the Ceramics.

OR

- 1 Full Question : 10**
Classify Dental waxes. Write ideal requirements, composition, and role of each ingredient of Inlay wax.

- 2 Answer in brief : (Any Five) 10**
(a) Manipulation steps of Impression compound.
(b) What is green strength?
(c) What is soluble plaster?
(d) What is glass transition temperature?
(e) Composition of Zinc phosphate cement.
(f) Define setting and working time.

- 3 Write short notes : (Any Five) 15**
(a) Dental Implants.
(b) Dimensions of colour.
(c) Describe stress & strain graph.
(d) Theories of setting reactions of Gypsum products.
(e) Causes of porosity in acrylic resins.
(f) Setting reaction of Zinc oxide Eugenol Paste.

SECTION – II

4 Full Question : 10

Classify composite resins. Justify how composite resins are better restorative materials than silver Amalgam in all aspects.

OR

4 Full Question : 10

Classify Dental casting alloys. Describe noble metal alloys in detail.

5 Answer : (Any Two) 10

- (a) Bonding between tooth structure with various restorative material.
- (b) Modifications of GIC in detail.
- (c) Compare and contrast Rubber base & Hydrocolloid impression materials.

6 Answer in brief : (Any Five) 15

- (a) Composition of irreversible hydrocolloid.
- (b) Bur design.
- (c) Difference between resin and porcelain teeth.
- (d) Classify Impression materials.
- (e) Mercury hazards in dentistry.
- (f) Curing cycles of acrylic resin.