

23 SEP 2020

SECOND YEAR BDS EXAMINATION  
Dental Materials  
AUGUST-SEPTEMBER 2020  
Subject Code: 9700

Time: 3 hours

Total Marks :70 marks

- Instructions : (1) Figure to the right indicates marks  
(2) Write legibly and to the point.  
(3) Draw diagrams wherever necessary

SECTION I

Q.1. Classify Dental Cements. Write in detail about composition, manipulation and properties of glass ionomer cement . 10 marks

Q.2. Classify Dental Ceramics. Write in details about composition of dental ceramics and add a note on methods of strengthening of dental ceramics 10 marks

OR

Q.2. Classify Dental casting alloy. Write in detail about casting defects.

Q.3. Write short notes ( Any three ) 09 marks

- a. Color in dentistry
- b. Laminate Technique
- c. Implant Biomaterials
- d. Gypsum Bonded Investment

Q.4. Multiple Choice Questions (Attempt all ) 06 marks

- 4.1. A.D.A. specification for gypsum products is
- |       |       |
|-------|-------|
| a) 28 | b) 30 |
| c) 17 | d) 25 |
- 4.2. The most commonly used accelerator in gypsum products
- |                      |           |
|----------------------|-----------|
| a) Potassium nitrate | b) Borax  |
| c) Potassium sulfate | d) Silica |
- 4.3. The sprue is attached at
- |              |              |
|--------------|--------------|
| a) 90 degree | b) 45 degree |
| c) 30 degree | d) 0 degree  |
- 4.4. Wavelength of light used for composites
- |           |           |
|-----------|-----------|
| a) 480 nm | b) 500 nm |
| c) 520 nm | d) 560 nm |
- 4.5. Initiator used in autopolymerising denture base resin is :
- |                     |                 |
|---------------------|-----------------|
| a) Camphroquinone   | b) Hydroquinone |
| c) Benzoyl Peroxide | d) Silica       |
- 4.6. The total area under stress strain graph represents :
- |                   |                        |
|-------------------|------------------------|
| a) Toughness      | b) Resilience          |
| c) Yield strength | d) Proportional limit. |

## SECTION II

Q.5. Classify Impression materials. Write in detail about composition, manipulation and properties of addition silicone impression material . 10 marks

Q.6. Classify Dental Waxes. Write in details about composition and manipulation of Inlay wax. 10 marks

OR

Q.6. Classify Dental amalgam. Write in detail about composition and properties of dental amalgam.

Q.7. Write short notes (Any three ) 09 marks

- e. Direct Filling Gold
- f. Ductility and malleability
- g. Finishing and Polishing Instruments.
- h. Tarnish and Corrosion

Q.8. Multiple Choice Questions ( Attempt all ) 06 marks

8.1. A.D.A. specification for inlay wax is

- a) 04
- b) 30
- c) 17
- d) 25

8.2. 18-8 stainless steel contains :

- a) 18 % nickel 8% chromium
- b) 18 % copper 8 % nickel
- c) 18% chromium 8 % nickel
- d) 18 % iron 8% steel

8.3. The temperature difference between liquefaction and gelation is called as :

- a) Syncrsis
- b) Imbibition
- c) Hystresis
- d) None of the above

8.4. Obtundant effect is shown by :

- a) ZOE cement
- b) Calcium Hydroxide cement
- c) Glass ionomer cement
- d) Zinc Phosphate cement

8.5. Impression material used for final impression for complete denture

- a) Impression plaster
- b) Zinc Oxide Eugenol Impression Paste
- c) Alginate
- d) Impression Compound

8.6. Boiling point of monomer is :

- a) 100.4 degree celsius
- b) 101.8 degree Celsius
- c) 100.8 degree celsius
- d) 100 degree celsius .