

Sl.No. M21509

Course Code : 161322T04

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM  
(Deemed to be University)**

**BDS DEGREE EXAMINATION – August 2019  
Second Year**

**DENTAL MATERIALS**

**SECTION A**

**Time: Twenty Minutes**

**Maximum: 20 marks**

**Register Number :**

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**Signature of the candidate**

**Signature of the Invigilator**

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**Instructions to the candidates**

- 1. Write your Register Number and sign at the place specified on the first page of this Question Booklet.**
- 2. Do not open this question booklet until Invigilator announces the commencement of the examination.**
- 3. Answer ALL the Twenty questions. They carry equal marks. No negative marking for wrong answers.**
- 4. Answers should be marked legibly in the SHEET provided in capital letters.**
- 5. THE QUESTION BOOKLET SHOULD NOT BE TAKEN OUT OF THE EXAMINATION HALL.**
- 6. Questions should not be copied and taken out of the Examination Hall. Any one found violating this rule shall not be permitted to write the examination and shall be sent out of the Hall.**
- 7. At the end of 20 minutes, when the Invigilator announces 'STOP WRITING' you must stop writing immediately. If the candidate tries to attempt to answer the questions after the prescribed time, their answer script becomes invalid.**
- 8. Hand over the questions booklet containing answer sheet to the invigilator when you finish answering or immediately after 20 minutes.**

**DENTAL MATERIALS**  
**SECTION-A (20X1=20 MARKS)**  
(Multiple choice questions)

Time: Twenty Minutes

Maximum: 20 marks

Select the most appropriate answer and answer in the answer sheet attached:

1. In which class of cavities is amalgam contraindicated?
  - A. Class 1
  - B. Class 2
  - C. Class 4
  - D. Class 5
2. Average mercury content in well condensed amalgam should not exceed:
  - A. 30%
  - B. 40%
  - C. 50%
  - D. 60%
3. Surface hardness of gold foil during condensation:
  - A. Always increases
  - B. Always decreases
  - C. Increased followed by a decrease
  - D. Not correlated
4. The agent used to provide barrier against the passage of irritant in to the dentinal tubules is:
  - A. Cavity varnish
  - B. Cavity liner
  - C. Cement sub-base
  - D. Dentin smear plugs
5. Corrosion occurring due to variation in the electrolyte (or) in the variation of composition of a given electrolyte is known as:
  - A. Galvanic corrosion
  - B. Crevice corrosion
  - C. Stress corrosion
  - D. Corrosion due to heterogeneous composition
6. Metal that possess property of cold welding is:
  - A. Silver
  - B. Platinum
  - C. Zinc
  - D. Gold

(p.t.o.)

7. Which of the following do polycarboxylate and GIC have in common?
- A. Polysiloxane
  - B. Poly acyclic acid
  - C. Phosphoric acid
  - D. Ion leachable glass
8. Which of the following type of glass ionomer cement is used for restoration?
- A. Type I
  - B. Type II
  - C. Type III
  - D. Type IV
9. Ph of calcium hydroxide liner is?
- A. 1.5
  - B. 7
  - C. 10
  - D. 11
10. Commonly used acid for enamel etching is:
- A. EDTA 4%
  - B. Citric acid 2%
  - C. Phosphoric acid 37%
  - D. Malic acid 30%
11. 4<sup>TH</sup> state of matter is called:
- A. Solid
  - B. Liquid
  - C. Gas
  - D. Colloid
12. The property of a metal that permits it to be drawn in to wires is called as:
- A. Resilience
  - B. Flexibility
  - C. Malleability
  - D. Ductility
13. Type III dental gypsum is:
- A. Class III stone
  - B. Densite
  - C. Class I stone/ hydrocal
  - D. Model lab plaster

14. Most commonly used accelerator in gypsum products:
- A. Sodium fluoride
  - B. Potassium fluoride
  - C. Potassium sulphate
  - D. Aluminium sulphate
15. Perforated impression trays are used for:
- A. Alginate
  - B. Zinc oxide eugenol
  - C. Agar-agar
  - D. Impression compound
16. Dough stage of denture base resin should remain mouldable for at least:
- A. 3 Minutes
  - B. 5 Minutes
  - C. 10 Minutes
  - D. 12 Minutes
17. Chemical bond to denture is present in:
- A. Porcelain teeth
  - B. Resin teeth
  - C. Both
  - D. None
18. The main constituent of inlay wax which makes it flake resistant is:
- A. Paraffin
  - B. Gum-dammar
  - C. Carnauba
  - D. Candeliba
19. Which is not present in porcelain?
- A. Silica
  - B. Feldspar
  - C. Calcium-carbonate
  - D. Amorphous material
20. Stainless steel with least strength:
- A. Ferrite
  - B. Austenite
  - C. Martensite
  - D. Cementite

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**BDS DEGREE EXAMINATION – August 2019  
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**DENTAL MATERIALS**

Time : Three hours

Maximum : 70 marks

Answer ALL Questions

Answer Section A in the Answer Sheet attached to it 20 marks – 20 minutes to be handed over to the invigilator immediately after 20 minutes

Answer Section B & C in the same answer book

Time : 2 hours 40 minutes

**SECTION – B & C** Maximum : 50 marks

**SECTION – B**

I. Write an Essay on : (1 x 10 = 10)

1. Define impression? Classify impression materials, discuss about the composition, properties, manipulation and making of an impression using irreversible hydrocolloid impression material (Alginate).

II. Write short notes on : (3 x 5 = 15)

2. Inlay casting wax.
3. Types of stainless steels, composition and their mechanical properties.
4. CAD CAM Ceramics.

**SECTION – C**

III. Write an Essay on: (1 x 10 = 10)

5. Classify dental cements? Discuss the composition, setting reaction and properties of glass ionomer cement.

IV. Write short notes on : (3 x 5 = 15)

6. Direct filling gold.
7. Difference between low copper alloys and high copper alloys.
8. Define corrosion? Write about galvanic corrosion.

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