

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

**BDS DEGREE EXAMINATION –September 2021
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

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. Time dependant flow is known as
 - A. Viscosity
 - B. Resilience
 - C. Creep
 - D. Toughness
2. Plasters manufactured by
 - A. Wet calcification
 - B. Dry calcification
 - C. Wet calcination
 - D. Dry calcination
3. Grainy imprecision occurs by alginate due to
 - A. Inadequate mixing
 - B. Prolonged mixing
 - C. Lesswater in mix
 - D. All of the above
4. Highest tear resistance is found in
 - A. Polysulfide
 - B. Poly ether urethane dimethyl acetate
 - C. Poly ether
 - D. Addition Silicone
5. Which of the following waxes is used for casting pattern making?
 - A. Boxing wax
 - B. Utility wax
 - C. Inlay wax
 - D. Corrective wax
6. Which of the following is/are inhibitor(s) of Polymerization?
 - A. Impurities
 - B. Hydroquinone
 - C. Oxygen
 - D. All of the above
7. Duration of Bench curing is
 - A. 20 min
 - B. 30 min
 - C. 90 min
 - D. 120 min
8. Preconditioning treatment of metal cast is done by
 - A. Sulfuric acid
 - B. Hydrogen chloride
 - C. Ammonium hydroxide
 - D. Phosphoric acid
9. Type III ZOE is used for
 - A. Temporary cementation
 - B. Permanent Cementation
 - C. Temporary filling
 - D. Cavity liner

10. Treatment of exposed vital pulp is
 - A. Indirect pulp capping
 - B. Direct pulp capping
 - C. Pulpotomy
 - D. Both B and C
11. Acid etching was developed by
 - A. Smith
 - B. GV black
 - C. Buonocore
 - D. Aristotle
12. How much copper is present in admixed amalgam alloy powder?
 - A. 69%
 - B. 27%
 - C. 56%
 - D. 13%
13. DICOR is
 - A. Leucite – reinforced porcelain
 - B. Glass infiltrated spinal core
 - C. Castable glass ceramic
 - D. Magnesia core porcelain
14. Density of Gold is:
 - A. 10.4 gm/cm³
 - B. 19.3 gm/cm³
 - C. 14.4 gm/cm³
 - D. 12.4 gm/cm³
15. Which of the following is not an allotropic form of silica?
 - A. Quartz
 - B. Cristobalite
 - C. Tridymite
 - D. None
16. Black casting occurs due to
 - A. Overheating of investment
 - B. Incomplete and limitation of wax
 - C. Both
 - D. None
17. Crevice corrosion is also known as
 - A. Stress corrosion
 - B. Concentration cell corrosion
 - C. Galvanic corrosion
 - D. None
18. Rough is
 - A. Ferric Oxide
 - B. Iron Oxide
 - C. Chronic Oxide
 - D. Silicon Carbide
19. Which of the following helps in age hardening process?
 - A. Silver
 - B. Copper
 - C. Platinum
 - D. Palladium
20. pH of non – Eugenol temporary cement is
 - A. 6
 - B. 7
 - C. 8
 - D. 9

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**BDS DEGREE EXAMINATION – September 2021
Second Year**

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. Write in detail about the composition, setting reaction Gio compatibility, types and uses of GIC. Add a note on modified GIC.

II. Write short notes on :

(3 x 5 = 15)

2. Dental abrasives. Write classification and uses of various abrasives. (1+2+2)
3. Heat treatment of Gold alloys.
4. Test for Gio compatibility.

SECTION – C

III. Write an Essay on :

(1 x 10 = 10)

5. Classify impression materials. Write in detail about the composition, setting reaction, uses, advantages, disadvantages and modifications of irreversible hydrocolloid.

IV. Write short notes on :

(3 x 5 = 15)

6. Chemical stages of Polymerization.
7. Types of waxes in dentistry.
8. Porosities in dental casting.
