

**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 :

--	--	--	--	--	--	--	--	--	--

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. Acid Base reaction occurs in
 - A. Glass Ionomer cement
 - B. Compomer
 - C. Resin cement
 - D. All of the above
2. The mixing procedure of amalgam is called
 - A. Condensation
 - B. Trituration
 - C. Compaction
 - D. Manipulation
3. Admixed alloy is a type of
 - A. Low copper alloy
 - B. Single compositional alloy
 - C. High Copper alloy
 - D. All of the above
4. Degassing is done for
 - A. Direct filling gold
 - B. Low Copper Alloys
 - C. High Copper Alloys
 - D. Resins
5. Microfilled composites has the filler size of
 - A. 50 μm
 - B. 0.04 μm
 - C. 8 μm
 - D. 12 μm
6. A chemical added to the resin systems to provide increased working time is
 - A. Resin Matrix
 - B. Filler
 - C. Initiator
 - D. Inhibitor
7. A hydrophilic, low Viscosity resin that promotes bonding to dentin is called
 - A. Etchant
 - B. Adherent
 - C. Primer
 - D. Adhesive
8. Which of the following prevents demineralization of Enamel?
 - A. Chloride
 - B. Fluoride
 - C. Phosphate
 - D. Silicate
9. Calcium hydroxide cavity liners aids in the formation of
 - A. Dentinal Tubules
 - B. Fluorapatite
 - C. Reparative Dentin
 - D. Hydroxyapatite
10. Atraumatic restorative treatment is done with
 - A. Conventional Glass Ionomer
 - B. Resin modified Glass Ionomer
 - C. Metal reinforced Glass Ionomer
 - D. High Viscous Glass Ionomer

11. The load that tends to stretch a body is called
 - A. Compressive Stress
 - B. Tensile Stress
 - C. Shear Stress
 - D. Axial Stress
12. Ability of a material to be readily drawn into wires is called
 - A. Malleability
 - B. Compressibility
 - C. Ductility
 - D. Tensile Strength
13. Which of the following is micro hardness test?
 - A. Brinell's test
 - B. Rockwell's test
 - C. Bard's test
 - D. Knoop test
14. Morcaptan is
 - A. Polyethers
 - B. Polysulfide
 - C. Condensation Silicone
 - D. Addiction Silicone
15. The investment material of choice for Gold alloy is
 - A. Gypsum bonded Investment
 - B. Phosphate bonded Investment
 - C. Ethyl silicate bonded Investment
 - D. All of the above
16. Which of the following material is amorphous?
 - A. Metals
 - B. Hydrocolloids
 - C. Waxes
 - D. Elastomers
17. Isothermal heat treatment of a wrought alloy is called
 - A. Annealing
 - B. Soldering
 - C. Welding
 - D. Brazing
18. The dental ceramics with high fracture toughness is
 - A. Feldspathic porcelain
 - B. Zirconium dioxide
 - C. Leucite reinforced porcelain
 - D. Aluminous Porcelain
19. The initiator in light activated denture base resin is
 - A. Camphorquinone
 - B. Hydroquinone
 - C. UV light
 - D. Visible light
20. Which of the following is a base metal alloy?
 - A. Gold Copper
 - B. Platinum Palladium
 - C. Nickel Titanium
 - D. Silver Platinum

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

**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. List the denture base resins and enumerate in detail the composition, molding technique, Properties and curing cycle of Heat activated denture base resin.

II. Write short notes on :

(3 x 5 = 15)

2. Transformation Toughening.
3. Irreversible Hydrocolloid.
4. Waxes used in Prosthodontics.

SECTION – C

III. Write an Essay on :

(1 x 10 = 10)

5. Explain in detail the structural components of the composite restorative material.

IV. Write short notes on :

(3 x 5 = 15)

6. Ideal requirement of luting cement.
7. Calcium Hydroxide.
8. Soldering Flux
