

# BBQ

## PROVISIONAL ANSWER KEY (CBRT)

Name of the post	Tutor Dental Materials Class-2
Advertisement No.	07/2021-22
Preliminary Test held on	24-10-2021
Question No	001 -200
Publish Date	25-10-2021
Last Date to Send Suggestion(s)	02-11-2021

THE LINK FOR ONLINE OBJECTION SYSTEM WILL START FROM 26-10-2021; 04:00 PM ONWARDS

### Instructions / સૂચન

**Candidate must ensure compliance to the instructions mentioned below, else objections shall not be considered: -**

- (1) All the suggestion should be submitted through **ONLINE OBJECTION SUBMISSION SYSTEM** only. Physical submission of suggestions will not be considered.
- (2) Question wise suggestion to be submitted in the prescribed format (proforma) published on the website / online objection submission system.
- (3) All suggestions are to be submitted with reference to the Master Question Paper with provisional answer key (Master Question Paper), published herewith on the website / online objection submission system. Objections should be sent referring to the Question, Question No. & options of the Master Question Paper.
- (4) Suggestions regarding question nos. and options other than provisional answer key (Master Question Paper) shall not be considered.
- (5) Objections and answers suggested by the candidate should be in compliance with the responses given by him in his answer sheet. Objections shall not be considered, in case, if responses given in the answer sheet /response sheet and submitted suggestions are differed.
- (6) Objection for each question should be made on separate sheet. Objection for more than one question in single sheet shall not be considered.

**ઉમેદવારે નીચેની સૂચનાઓનું પાલન કરવાની તકેદારી રાખવી, અન્યથા વાંધા-સૂચન અંગે કરેલ રજૂઆતો ધ્યાને લેવાશે નહીં**

- (1) ઉમેદવારે વાંધા-સૂચનો ફક્ત ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ દ્વારા જ સબમીટ કરવાના રહેશે. રૂબરૂ અથવા ટપાલ દ્વારા આયોગની કચેરીએ મોકલવા આવેલ વાંધા-સૂચનો ધ્યાને લેવામા આવશે નહીં જેની ખાસ નોંધ લેવી.
- (2) ઉમેદવારે વાંધા-સૂચનો રજૂ કરવા વેબસાઇટ / ઓનલાઇન ઓબ્જેક્શન સબમીશન સીસ્ટમ પર પ્રસિધ્ધ થયેલ નિયત નમૂનાનો જ ઉપયોગ કરવો.
- (3) ઉમેદવારે પોતાને પરીક્ષામાં મળેલ પ્રશ્નપુસ્તિકામાં છપાયેલ પ્રશ્નક્રમાંક મુજબ વાંધા-સૂચનો રજૂ કરતા તમામ વાંધા-સૂચનો વેબસાઇટ પર પ્રસિધ્ધ થયેલ પ્રોવિઝનલ આન્સર કી (માસ્ટર પ્રશ્નપત્ર)ના પ્રશ્ન ક્રમાંક મુજબ અને તે સંદર્ભમાં રજૂ કરવા.
- (4) માસ્ટર પ્રશ્નપત્રમાં નિર્દિષ્ટ પ્રશ્ન અને વિકલ્પ સિવાયના વાંધા-સૂચનો ધ્યાને લેવામાં આવશે નહીં.
- (5) ઉમેદવારે પ્રશ્નના વિકલ્પ પર વાંધો રજૂ કરેલ છે અને વિકલ્પ રૂપે જે જવાબ સૂચવેલ છે એ જવાબ ઉમેદવારે પોતાની ઉત્તરવહીમાં આપેલ હોવો જોઈએ. ઉમેદવારે સૂચવેલ જવાબ અને ઉત્તરવહીનો જવાબ ભિન્ન હશે તો ઉમેદવારે રજૂ કરેલ વાંધા-સૂચનો ધ્યાનમા લેવાશે નહીં.
- (6) એક પ્રશ્ન માટે એક જ વાંધા-સૂચન પત્રક વાપરવું. એક જ વાંધા-સૂચનો પત્રકમાં એકથી વધારે પ્રશ્નોની રજૂઆત કરેલ હશે તો તે અંગેના વાંધા-સૂચનો ધ્યાને લેવાશે નહીં.

**Website link for online objection submission system : [www.safevaults.in/login](http://www.safevaults.in/login)**

001. Which of the following is the safest and most reliable method of regulating the setting time of gypsum products?  
 (A) Altering the water/powder ratio  
 (B) Speed of hand spatulation  
 (C) Adding salt to the mixture  
 (D) Controlling the temperature of water used for mixing
002. The decrease in the marginal leakage of amalgam restorations is primarily the result of  
 (A) Using cavity varnish (B) Water sorption  
 (C) Formation of corrosion products (D) Expansion of the alloy
003. Which of the following materials can be electroplated without the risk of distortion?  
 (A) Polysulphide (B) Polyether  
 (C) Addition silicone (D) Alginate
004. Which of the following is a characteristic feature of high copper amalgam alloy?  
 (A) Less compressive strength (B) High marginal breakdown  
 (C) High fracture resistance (D) High creep
005. The pH of zinc phosphate cement becomes neutral in  
 (A) 24-48 hours (B) 30-60 minutes  
 (C) 1 week (D) 4-6 hours
006. Which of the following statements is best related to cavity varnish?  
 (A) Varnishes are synthetic resins dissolve in acetone  
 (B) Varnishes are calcium hydroxide in a resin base  
 (C) Varnishes are base of zinc oxide eugenol  
 (D) Varnishes provide thermal insulation to the pulp
007. The highest mercury concentration in amalgam restorations is found in  
 (A) The center of the restoration (B) At the margins of the restoration  
 (C) In the deepest part of the restoration (D) None of the above
008. The function of coupling agents in composite resins is to  
 (A) Increase cross linking (B) Bind the matrix together  
 (C) Bind the filler together (D) Bind the filler to the matrix
009. Which of the following properties would be of least importance in an impression material?  
 (A) Dimensional stability (B) Biocompatibility  
 (C) Flow (D) Adhesion
010. Heating a gypsum bonded investment to 1000°C will result in the release of  
 (A) Silver sulphide (B) Carbon mono oxide  
 (C) Hydrogen sulphide (D) Sulphur dioxide
011. Cement extensively used for attachment of orthodontic brackets to teeth is  
 (A) Glass ionomer cement (B) Zinc phosphate cement  
 (C) Resin cement (D) Zinc polycarboxylate cement

012. Activating compound for visible light curing resin is  
 (A) Hydroquinone (B) Ubiquinone  
 (C) Camphoroquinone (D) Benzoyl methyl ether
013. In light cure system the wavelength of radiation is in excess of  
 (A) 100 nm (B) 200 nm  
 (C) 300 nm  (D) 400 nm
014. Which of the following resins can be classified as thermosetting?  
 (A) Polystyrene (B) Vinyl resin  
 (C) Epoxy resin (D) None of the above
015. During the setting of gypsum, the mass thickens and then hardens into needle like clusters called  
 (A) Spicules (B) Crystallites  
 (C) Spherulites (D) Micelles
016. Which of the following colloidal solutions can be termed aerosol?  
 (A) Liquid in solid (B) Gas in liquid  
 (C) Liquid in air (D) Solid in liquid
017. The firing temperature of high fusing porcelain lies in the range of  
 (A) 1600 - 1950°F (B) 2000 - 3400°F  
 (C) 2350 - 2500°F (D) 1000 - 1500°F
018. Dicor is  
 (A) Castable ceramic  
 (B) Ceramic material with minimum porosity and excellent esthetics  
 (C) A type of composite resin with minimum porosity and excellent esthetics  
 (D) A type of synthetic resin
019. Which of the following cements bonds to tooth structure, is anticariogenic, has a degree of translucency and is non-irritating to the pulp?  
 (A) Polycarboxylate cement (B) Resin cement  
 (C) Glass ionomer cement (D) Silicate cement
020. Creep value is the highest in  
 (A) High copper amalgam (B) Admixed amalgam  
 (C) Low copper amalgam (D) It is the same in all
021. Which of the following is used for pickling of casting done with gypsum bonded investments?  
 (A) Hydrochloric acid (B) Phosphoric acid  
 (C) Sulphuric acid (D) Hydrogen peroxide
022. What is the purpose of adding ortho-ethoxy benzoic acid to zinc oxide eugenol cement?  
 (A) To improve the ease of manipulation (B) To render the cement light curable  
 (C) To improve the compressive strength (D) To improve the tensile strength

023. What is the function of feldspar in dental porcelain?  
 (A) To form a glass phase that is able to soften and flow slightly at firing temperature  
 (B) To prevent cracking of porcelain  
 (C) To decrease the viscosity of porcelain  
 (D) To form a carbon layer that flows during the firing temperature
024. Which of the following is true regarding alginate impression material?  
 (A) Sodium phosphate acts as an accelerator  
 (B) The set material is a hydrocolloid gel  
 (C) The impression is stored in water to prevent imbibition  
 (D) The impression should be poured after 1 hour
025. In heat cure denture base acrylic resin, the monomer is?  
 (A) Methacrylate  
 (B) Ethyl methyl methacrylate  
 (C) Poly methyl methacrylate  
 (D) Methyl ethyl methacrylate
026. Which of the following statements is true regarding base metal alloys?  
 (A) The casting shrinkage of base metal alloys is less than that of gold alloys  
 (B) Chromium added to base metal alloys acts as a solid solution hardener  
 (C) Cobalt provides flexibility to base metal alloys  
 (D) Manganese and silicone act as accelerators in base metal alloys
027. Which of the following abrasives have maximum hardness?  
 (A) Sand  
 (B) Emery  
 (C) Boron carbide  
 (D) Silicon carbide
028. What must be added to steel to make it stainless steel?  
 (A) Carbon less than 1.2%  
 (B) Chromium 12 - 30%  
 (C) Chromium oxide 3 - 20%  
 (D) Fluoride 2 - 3%
029. VLC resins are also known as  
 (A) Microwave activated resins  
 (B) Light cure resins  
 (C) Heat cure resins  
 (D) Tertiary amine activated resins
030. The most common coupling agent in composite resins is  
 (A) Paraben  
 (B) Chelane  
 (C) Silane  
 (D) Ligane
031. Along with polymerization shrinkage, one other major disadvantage of polymethyl methacrylate as denture base resins are poor  
 (A) Esthetic properties  
 (B) Mechanical properties  
 (C) Biological properties  
 (D) Thermal properties
032. The most commonly used laser for curing composite resin is  
 (A) ER: YAG  
 (B) Nd: YAG  
 (C) Argon  
 (D) CO<sub>2</sub>
033. The principal hardener in noble metal casting alloys is  
 (A) Iron  
 (B) Silver  
 (C) Copper  
 (D) Platinum

034. A compressive stress is always accompanied by  
 (A) Compressive strain                      (B) Elastic strain  
 (C) Shear strain                                      (D) Tensile strain
035. When softening impression compound in a water bath, manual kneading is done to  
 (A) Remove incorporated water  
 (B) Prevent the leaching out of plasticizer  
 (C) Increase flow  
 (D) Obtain uniform plasticity throughout the mass
036. In noble metal casting alloys, platinum can be substituted by  
 (A) Carbon    (B) Gallium  
 (C) Nickel     (D) Palladium
037. The primary corrosion products of amalgam are  
 (A) Silver chloride or fluoride                      (B) Copper sulphate  
 (C) Oxides and chlorides of tin                      (D) Zinc and silver dioxide
038. Which of the following hardness tests uses a hardened steel ball indenting tool?  
 (A) Vicker's hardness test                      (B) Knoop hardness test  
 (C) Brinell Hardness test                      (D) Rockwell hardness test
039. The green strength of a gypsum product refers to its  
 (A) Wet strength                                      (B) Actual strength  
 (C) Apparent strength                                      (D) Dry strength
040. The sprue should be attached to the wax pattern  
 (A) On a flat surface                                      (B) At the thinnest point  
 (C) At the point of greatest bulk                      (D) At any proximal surface
041. The film thickness for a luting cement should not be greater than  
 (A) 100  $\mu\text{m}$     (B) 1.5  $\mu\text{m}$   
 (C) 25  $\mu\text{m}$     (D) 500  $\mu\text{m}$
042. In PFM restorations, porcelain bonds to metal by?  
 (A) Mechanical bonding                                      (B) Chemical bonding  
 (C) Compressive bonding                                       (D) All of the above
043. An alloy is a solid mixture of  
 (A) Two or more metals  
 (B) Two or more metals one of which is mercury  
 (C) Two or more metals one of which is amalgam  
 (D) Three or more metals one of which is gold
044. Methyl methacrylate denture base resins contain all of the following except  
 (A) Dibutyl phthalate                                      (B) Glycol dimethacrylate  
 (C) Benzoyl peroxide                                       (D) Sodium silicate



055. The base paste of condensation silicone has a low molecular weight dimethyl siloxane with a terminal
- (A) Mercaptan group (B) Silane group  
(C) Hydroxyl group (D) Vinyl group
056. All of the following statements about base metal alloys are true EXCEPT
- (A) They have a modulus of elasticity twice that of the gold alloys  
(B) They are more rigid than gold alloys  
(C) They have more ductility than gold alloys  
(D) They have a lower proportional limit than gold alloys
057. The impression material with the least dimensional change upon disinfection is
- (A) Agar (B) Polysulfide  
(C) Polyether (D) Addition silicone
058. Addition of large amounts of platinum to a casting gold alloy will
- (A) Decrease its strength and ability to be hardened  
(B) Decrease its tarnish resistance  
(C) Increase its fusion temperature  
(D) Redden the alloy
059. The pattern for the metal framework of a removable partial denture is fabricated from
- (A) Type II inlay wax (B) Boxing wax  
(C) Casting wax (D) Modelling wax
060. The main form of iron carbide found in 18-8 stainless steel is
- (A) Martensite (B) Ferrite  
(C) Austenite (D) Pearlite
061. Flux is used during casting to
- (A) Remove the oxides formed on the gold alloy  
(B) Lower the melting point  
(C) Replace casting wax  
(D) Speed the burnout process
062. Niti alloys have
- (A) Hyper rigidity (B) Corrosion resistance  
(C) Shape memory (D) Weldable properties
063. The wax pattern should be invested immediately to decrease the dimensional changes caused by
- (A) Decrease of flow (B) Continuous expansion  
(C) Water loss (D) Relaxation of internal stresses
064. The hardness number which does not depend on the ductility of metal is
- (A) KHN (B) VHN  
(C) RHN (D) BHN

065. When a solid gets wet completely the contact angle is  
 (A)  $90^\circ$  (B)  $0^\circ$   
 (C)  $0 - 90^\circ$  (D)  $> 90^\circ$
066. The pH of polycarboxylate liquid is  
 (A) 5 (B) 7  
 (C) 8 (D) 1.7
067. The etchant is preferred in gel form than liquid form for  
 (A) Better control over placement  
 (B) To enhance the concentration of acid  
 (C) To help in visualization during placement  
 (D) None of the above
068. During the polymerization of acrylic resin, above what temperature does benzoyl peroxide form free radicals?  
 (A)  $25^\circ\text{C}$  (B)  $37^\circ\text{C}$   
 (C)  $50^\circ\text{C}$  (D)  $60^\circ\text{C}$
069. The residual monomer content of chemically activated resins is  
 (A) 0.2% to 0.5% (B) 2% to 5%  
 (C) 0.3% to 0.5% (D) 3% to 5%
070. The process in which two or more chemically different monomers, each with some desirable property, can be combined to yield specific physical properties of a polymer is known as  
 (A) Step-growth polymerization (B) Addition polymerization  
 (C) Copolymerization (D) Condensation polymerization
071. Which of the following is used as filler in composite resins?  
 (A) Quartz (B) Silicates  
 (C) Zinc Particles (D) Aluminum
072. The best material for duplication of cast is  
 (A) Alginate (B) Agar agar  
 (C) Polysulfide (D) Plaster of Paris
073. Palladium is added to polyvinyl siloxane to  
 (A) Help as a surfactant (B) Act as a scavenger  
 (C) Act as a plasticizer (D) Act as a catalyst
074. The impression material used to record the prepared areas on abutment teeth is  
 (A) High viscosity elastomeric impression material  
 (B) Medium viscosity elastomeric impression material  
 (C) Low viscosity elastomeric impression material  
 (D) None of the above
075. Vulcanization refers to the setting of  
 (A) Reversible hydrocolloid (B) Mercaptan impression material  
 (C) Zinc oxide eugenol (D) Zinc phosphate

076. The impression for a diagnostic cast of a partial edentulous mouth should be made with  
 (A) Alginate (B) Impression compound  
(C) Hydrocal (D) Impression wax
077. Property of the material which describes resistance to abrasion is  
(A) Yield strength (B) Modulus of elasticity  
 (C) Hardness (D) None of the above
078. A material behaves in certain ways above and below the proportional limit on a stress strain curve, which of the following is correct?  
 (A) Above the proportional limit a material function in a plastic manner, while below the proportional limit it behaves as an elastic  
(B) Above the proportional limit a material function in an elastic manner, while below the proportional limit it behaves as plastic  
(C) Either (A) or (B)  
(D) Neither (A) nor (B)
079. An alloy in which the atoms of the two metals intermingle randomly in a common space lattice, and the metals are soluble in each other in the solid state is known as  
(A) Intermetallic compound (B) Eutectic alloy  
 (C) Solid solution (D) Peritectic alloy
080. Strain hardening of a metal would result in an increase in its  
(A) Elastic modulus (B) Ductility  
(C) Resistance to corrosion  (D) Strength
081. Fillers are added in composite resin to  
(A) Inhibit deformation of the matrix  
(B) Reduce the coefficient of thermal expansion of the resin matrix  
 (C) Both (A) and (B)  
(D) None of the above
082. Zinc oxide eugenol paste can be used for making inter-occlusal record because  
(A) Can be easily removed from undercuts  
 (B) Offers no resistance to the closing of mandible  
(C) Records surface detail better  
(D) Requires less time to set
083. Chemical tempering in porcelains is done to interrupt crack propagation by  
(A) Transformation toughening  
(B) Dispersion of crystalline phase  
 (C) Inducing residual compressive strength  
(D) All of the above
084. The opacity in ceramics is achieved by adding  
(A) Boric oxide (B) Copper oxide  
(C) Silica  (D) Titanium oxide

085. All of the following are inorganic phases used in composite resin EXCEPT  
 (A) Quartz (B) Borosilicate  
 (C) Lithium aluminum silicate (D) Bis GMA resin
086. Glass ionomer cements are primarily used for  
 (A) Temporary restorations (B) For pulp capping  
 (C) For restoring eroded areas (D) For high strength bases
087. When cristobalite is heated to 300°C, it  
 (A) Exhibits slight shrinkage (B) Changes from beta to alpha form  
 (C) Decreases in density (D) Inverts from a high form to a low form
088. To prevent porosity in porcelain it should be baked  
 (A) Under pressure (B) For a long time  
 (C) In vacuum (D) None of the above
089. Condensation shrinkage of porcelain during firing depends on  
 (A) Rate of arriving at firing temperature (B) Uniformity of particle size  
 (C) Type of investment used (D) Shape and size of particle
090. Phenomenon in which porcelain appears different under varying light condition is  
 (A) Translucency (B) Refractive optics  
 (C) Opacification (D) Metamerism
091. The first manifestation that plaster has deteriorated from storage in a humid environment is.  
 (A) Decrease in hardness (B) Decrease in setting time  
 (C) An increase in porosity (D) A change in color
092. Biological tests in which the material is evaluated in experimental animals under conditions that simulate the clinical use of the material are termed as  
 (A) Level I test (B) Level II tests  
 (C) Level III tests (D) Level IV tests
093. The powder of polycarboxylate cement contains all of the following EXCEPT  
 (A) Zinc oxide (B) Magnesium oxide  
 (C) Potash alum (D) Polyacrylic acid
094. The main prerequisite of die stone is  
 (A) Low porosity (B) Low setting expansion  
 (C) High strength (D) Low flow
095. The casting ring may be lined with asbestos to  
 (A) Allow for mold expansion  
 (B) Prevent cracking of the mold  
 (C) Reduce the amount of investment required for casting  
 (D) None of the above
096. Which of the following forms of iron are soft and ductile?  
 (A) Cementite and martensite (B) Martensite and ferrite  
 (C) Ferrite and austenite (D) Austenite and cementite

097. The mold cavity is packed with heat cure acrylic resin in  
 (A) Rubbery stage (B) Wet sand stage  
 (C) Dough stage (D) Stringy stage
098. The Young's modulus of a material is indicative of  
 (A) Rigidity (B) Resilience  
 (C) Abrasion resistance (D) Malleability
099. During casting procedure, subsurface porosity can be controlled by  
 (A) Mold temperature  
 (B) Sprue length  
 (C) Rate at which the molten metal enters the mold  
 (D) Melt temperature
100. A potentially toxic element in base metal alloys is  
 (A) Molybdenum  (B) Beryllium  
 (C) Boron (D) Magnesium
101. The liquid for zinc phosphate cements contains all of the following EXCEPT  
 (A) Sulfuric acid (B) Phosphoric acid  
 (C) Aluminum phosphate (D) Water
102. Direct filling powdered gold is normally supplied in which form?  
 (A) Powder enclosed in a capsule of inert material  
 (B) Pellet containing compressed powder  
 (C) Loose powder form  
 (D) Powder wrapped in a gold foil
103. If a dental cast is to be soaked for a long time, which type of water is to be used?  
 (A) Soap water (B) Tap water  
 (C) Slurry water (D) Distilled water
104. The best gas for melting an alloy is.  
 (A) Propane (B) Helium  
 (C) Natural gas (D) Hydrogen
105. Which of the following is not a type of copolymer?  
 (A) Block (B) Graft  
 (C) Chain transfer (D) Random
106. Tarnish of amalgam restorations is due to the formation of  
 (A) Silver sulfide (B) Tin oxide  
 (C) Silver halide (D) Copper sulfide
107. Human teeth possess which of the following hue portions of the color spectrum?  
 (A) Yellow and yellow-red (B) Red and yellow-red  
 (C) Green and yellow-green (D) Yellow-red and yellow-green

108. The growth of secondary dentin is best stimulated by  
 (A) Zinc phosphate cement (B) Resin cement  
 (C) Zinc polycarboxylate cement (D) Calcium hydroxide cement
109. The wetting of an adherent surface by an adhesive is related to  
 (A) Surface energy of the adherent (B) Surface texture of the adherent  
 (C) Surface tension of the adherent (D) Nature of the adherent
110. Which of the following properties of a dental material is time dependent?  
 (A) Resilience (B) Elastic limit  
 (C) Ultimate tensile strength (D) Creep
111. Which of the following hardness test is a microhardness test?  
 (A) Shore-A (B) Brinell  
 (C) Knoop (D) Rockwell
112. Space lattice refers to  
 (A) Inter atomic movement (B) Inter atomic imbalance  
 (C) Arrangement of atoms (D) Arrangement of molecules
113. Flux used in dental ceramic is  
 (A) Alumina (B) Silica  
 (C) Kaolin (D) Boric oxide
114. The main purpose of adding metallic oxides in ceramics is  
 (A) Color matching (B) Transparency  
 (C) Opacity (D) None of the above
115. The maximum shrinkage during firing process in ceramic occurs  
 (A) In low bisque stage (B) In medium bisque stage  
 (C) In high bisque stage (D) Fusion stage
116. A crystal in metal substructure is  
 (A) Grain (B) Nucleus  
 (C) Stroma (D) None of the above
117. Sublimation is a conversion of  
 (A) Solid directly to gas (B) Gas to liquid and then to solid  
 (C) Gas directly to liquid (D) Solid to liquid and then to gas
118. Crocus cloth is  
 (A) Emery (B) Garnet  
 (C) Pumice (D) Rouge
119. A good adhesive should possess all of the following EXCEPT  
 (A) High adherend wetting (B) High contact angle  
 (C) Low contact angle (D) High flow
120. Materials which have high compressive strength and low tensile strength are called  
 (A) Ductile (B) Brittle  
 (C) Malleable (D) Resilient

121. Setting expansion is advantageous in  
 (A) Casts (B) Investment  
 (C) Dies (D) Models
122. Back pressure porosity can be avoided by  
 (A) Using asbestos liner  
 (B) Placing the sprue at least one quarter inch away from the end of the casting ring  
 (C) Preventing rapid heating  
 (D) Using a short and wide sprue
123. Which of the following zones is used for melting alloys during casting?  
 (A) Oxidizing flame (B) Reducing flame  
 (C) Green flame (D) All of the above
124. The inlay wax used for direct technique is  
 (A) Type I (B) Type II  
 (C) Type III (D) Type IV
125. Impurities in casting are removed by  
 (A) Annealing (B) Degassing  
 (C) Pickling (D) Conditioning
126. Binder used in gypsum investment is  
 (A) Quartz (B) Silica  
 (C) Calcium sulfate monohydrate (D) Cristobalite
127. The component of inlay wax which increases resistance to flaking is  
 (A) Paraffin wax (B) Carnauba wax  
 (C) Candelilla wax (D) Gum dammar
128. Fins and spines on the casting are seen due to  
 (A) Prolonged heating (B) Rapid heating  
 (C) Under heating (D) High pressure during casting
129. Titanium casting is done  
 (A) Under vacuum in argon atmosphere  
 (B) Under air pressure in nitrogen atmosphere  
 (C) Under air pressure in vanadium atmosphere  
 (D) None of the above
130. Apoptosis is:  
 (A) Single cell Necrosis (B) Intracytoplasmic accumulation  
 (C) Degenerative change (D) Neoplastic Change in the cell
131. Difference in transudate & exudate is that the former has a:  
 (A) Low protein (B) Cloudy Appearance  
 (C) Increased Specific gravity (D) High Protein

132. Which is anti-inflammatory?  
 (A) Thromboxane (B) Lipoxins  
 (C) Prostacyclin (D) Prostaglandin
133. Oedema Caused by any of the following Except  
 (A) An increase in the plasma protein Concentration  
 (B) An increase in the hydrostatic pressure  
 (C) An increase in the capillary permeability  
 (D) Lymphatic Obstruction
134. Nut meg liver occurs in  
 (A) Jaundice (B) Chronic venous congestion  
 (C) Cirrhosis (D) Hepatocellular carcinoma
135. The common Cause of sudden Death in myocardial infarction is  
 (A) Pulmonary Embolism (B) Arrhythmias  
 (C) Congestive Heart Failure (D) None of the above
136. Onion Skin appearance is seen in  
 (A) Ewing's Sarcoma (B) Osteosarcoma  
 (C) Osteoma (D) Fibro Sarcoma
137. Pernicious anemia is associated with the deficiency of  
 (A) Folic Acid (B) Vitamin B1  
 (C) Vitamin B6 (D) Vitamin B12
138. Gingiva are enlarged in leukemia because of  
 (A) Capillary Dilation (B) Erythrocyte engorgement  
 (C) Edema (D) WBC Infiltration
139. Hemophilia is best treated by  
 (A) Dried freeze plasma (B) Factor VIII Concentrate  
 (C) Whole Blood (D) Cryoprecipitate
140. The Oropharyngeal candidiasis following long term therapy with a broad-spectrum antibiotic can be best treated with  
 (A) Griseofulvin (B) Amphotericin  
 (C) Fluconazole (D) Sulfonates
141. Coefficient of thermal expansion of tooth enamel is closest to  
 (A) Silicate Cement (B) Composite  
 (C) GIC (D) Polycarboxylate
142. Ductility represents  
 (A) Percent elongation (B) Plastic Strain  
 (C) Flexural Stress (D) Percentage Depression
143. Impression Compound has which of the following characteristic property  
 (A) Low Thermal Conductivity  
 (B) High flow property  
 (C) Degradation in presence of moisture  
 (D) Remain distortion free up to 72hrs pouring can be safely delayed

144. Hypersensitivity reactions like contact dermatitis can be caused by  
 (A) Polysulfide (B) Condensation Silicones  
 (C) Addition Silicones (D) Polyether
145. Gelation temperature of agar is between  
 (A) 20°C to 25°C (B) 27°C to 33°C  
 (C) 37°C to 50°C (D) 55°C to 60°C
146. Name the accelerator used in zinc oxide eugenol paste  
 (A) Zinc Acetate (B) Linseed oil  
 (C) Olive oil (D) All of the above
147. Alginates are made dust free by adding  
 (A) Glycol (B) Glycerol  
 (C) Glutamic acid (D) Alcohol
148. The minimum thickness of an alginate impression material should be  
 (A) 8 mm (B) 3 mm  
 (C) 6 mm (D) 5 mm
149. Model Plaster (White) used to cast study models before mixing with water, is largely composed of  
 (A) CaO (B) CaCO<sub>3</sub>  
 (C) (CaSO<sub>4</sub>)<sub>2</sub> · ½ H<sub>2</sub>O (D) CaSO<sub>4</sub> · 2H<sub>2</sub>O
150. The most commonly accelerator in gypsum product is  
 (A) Sodium Fluoride (B) Potassium Fluoride  
 (C) Potassium Sulfate (D) Aluminum Sulfate
151. In self cure acrylic resin, activator is  
 (A) Toluidine (B) Quaternary ammonium compound  
 (C) Benzoyl Peroxide (D) Tertiary amine
152. Subsurface porosity is due to  
 (A) Thermal Changes (B) Thickness of the resin  
 (C) Lack of temperature (D) Packing past the dough stage
153. Residual monomer content of chemically activated resin is  
 (A) 0.2% To 0.5% (B) 2% to 5%  
 (C) 0.3% to 0.5% (D) 3% to 5%
154. The minimum requirements for chemically activated resins used for repair applications of denture bases are identified in ADA specification number  
 (A) 15 (B) 13  
 (C) 14 (D) 12
155. Which of the following phases of dental amalgam has minimum strength?  
 (A) Gamma 1 (B) Gamma 2  
 (C) Epsilon 1 (D) Gamma 3

156. Discoloration of silver alloy is due to  
 (A) Tarnish (B) Tarnish and corrosion  
 (C) Wet corrosion (D) Dry Corrosion
157. Which of the following amalgam alloys is least susceptible to creep?  
 (A) Lathe cut (B) Spherical  
 (C) Microfine (D) Dispersion with high copper
158. The word amalgam refers to combination of any alloy or metal with  
 (A) Gold (B) Mercury  
 (C) Silver (D) Tin
159. Gypsum bonded investment should not be heated over  
 (A) 700°C (B) 1300°C  
 (C) 1063°C (D) 900°C
160. The purity of gold is expressed in  
 (A) Carats (B) Percentage  
 (C) Fineness (D) Gram
161. Investment material used for cobalt chromium alloys is  
 (A) Gypsum bonded (B) Phosphate bonded  
 (C) Silica Bonded (D) None of the above
162. Suck back porosity is due to  
 (A) Attached impurities on undersurface of casting  
 (B) Hot spot  
 (C) No Rapid Cooling  
 (D) Inadequate Melting temperature
163. Soldered connectors in Fixed partial dentures involve the use of an intermediate metal alloy whose melting temperature is  
 (A) Higher than parent metal (B) Lower than parent metal  
 (C) Equal to parent metal (D) Unrelated to parent metal
164. The effect of zinc oxide eugenol on the pulp?  
 (A) Is irritating (B) Encourages pulpal fibrosis  
 (C) Is sedating (D) Has no effect
165. Highest Slope in stress strain Graph is seen in?  
 (A) Ceramics (B) Enamel  
 (C) Gold Crown (D) Elastomers
166. Tetracycline Chelates with  
 (A) Ca Salt (B) Mg Salt  
 (C) All Salt (D) All of the above
167. Agents used in oral thrush  
 (A) Miconazole (B) Clobetasol  
 (C) Clotrimazole (D) Amoxycillin

168. The principal therapeutic action of the glucocorticoid is  
 (A) Antidiuretic (B) Antianabolic  
 (C) Anti-infective (D)  Anti-inflammatory
169. During Administration of NSAIDS in Children, the most important of dose administration is?  
 (A)  Weight of the Child (B) Age of the child  
 (C) Nature of the drug (D) Chronicity of pain
170. Drugs highly bound to albumin  
 (A)  NSAID'S (B) Lidocaine  
 (C) Beta blockers (D) Verapamil
171. Which among is not used for surface anesthesia?  
 (A) Lignocaine (B)  Procaine  
 (C) Tetracaine (D) Benzocaine
172. Cusp of carabelli can be considered a normal finding on  
 (A) Deciduous mandibular 1<sup>st</sup> molar (B) Deciduous maxillary 1<sup>st</sup> molar  
 (C)  Deciduous maxillary 2<sup>nd</sup> molar (D) Deciduous mandibular 2<sup>nd</sup> molar
173. Palatogingival groove is found in  
 (A)  Maxillary lateral incisor (B) Maxillary first premolar  
 (C) Maxillary First molar (D) All of the above
174. Group function occlusion is common in  
 (A) 10-14 years (B) 15-25 years  
 (C)  Above 30 years (D) Edentulous patients
175. Retrusion of mandible is achieved by  
 (A) Lateral pterygoid (B)  Temporalis  
 (C) Masseter (D) None of the above
176. The biting forces at molar region during mastication is  
 (A) 20 to 55 pounds (B) 30 to 75 pounds  
 (C) 50 to 75 pounds (D)  90 to 200 pounds
177. Type of cementum located in the furcation areas of multi-rooted teeth is  
 (A) Cellular extrinsic fiber cementum (B) Cellular intrinsic fiber cementum  
 (C)  Cellular mixed stratified cementum (D) Acellular intrinsic fiber cementum
178. Epithelial rests of malassez are found in  
 (A) Pulp (B) Gingiva  
 (C)  Periodontal ligament (D) Alveolar mucosa
179. Basal Bone is:  
 (A)  That part of the bone embracing apices of root of teeth  
 (B) Lower border of mandible  
 (C) Ramus of mandible  
 (D) That part of the bone containing teeth

180. Saliva has the following functions, except  
 (A) Defense function (B) Digestive function  
 (C) Absorptive function (D) Lubrication function
181. The pneumatization process in maxillary sinus completes in  
 (A) 6-8 years (B) 13-14 years  
 (C) 8-10 years (D) 18-20 years
182. Sublingual salivary gland lies  
 (A) Superior to mylohyoid (B) Inferior to mylohyoid  
 (C) Deep to genioglossus (D) Deep to geniohyoid
183. The Stage of deglutition, which is voluntary in nature  
 (A) Stage-I (B) Stage- II  
 (C) Stage- III (D) Stage- IV
184. Floor of mouth is made by which muscle  
 (A) Genioglossus (B) Geniohyoid  
 (C) Mylohyoid (D) Masseter
185. High content of cholesterol is present in  
 (A) Coconut oil  (B) Egg yolk  
 (C) Hydrogenated fat (D) Ghee (unsaturated)
186. Cereals are deficient in  
 (A) Vitamin C (B) Vitamin B-Complex  
 (C) Iron (D) Calcium
187. Purpose of sterilization is to eliminate  
 (A) Bacteria (B) Viruses  
 (C) Spore formers (D) Fungus
188. Australia antigen is associated with  
 (A) Hepatitis B surface antigen in acute hepatitis  
 (B) AIDS  
 (C) Chronic Leukemia  
 (D) Basal cell Carcinoma
189. The commonest parotid tumor is  
 (A) Pleomorphic adenoma (B) Warthins Tumour  
 (C) Adenoid Carcinoma (D) Secondaries
190. Which of the following conditions present with a palpable crepitus?  
 (A) Anaerobic infections (B) Streptococcal infections  
 (C) Surgical Emphysema (D) All of the above
191. In CPR, Chest compressions are done  
 (A) On the upper part of sternum  
 (B) On the xiphisternum  
 (C) On the middle of the lower part of the sternum  
 (D) On the left side of the chest

192. Main cause of shock is  
(A) Hypoxia (B) Hypotension  
 (C) Hypoperfusion of tissue (D) Not recalled
193. The term osseointegration was given by  
(A) Jeffrey Pokeson  (B) Branemark  
(C) Henry page (D) Robinson
194. The best method of measuring blood glucose level in the long term would be  
(A) Glucose Tolerance test (B) Benedict's test  
 (C) Glycosylated-Hb method (D) Stressed glucose tolerance test
195. Apart from dental caries, streptococcus mutans can cause  
 (A) Endocarditis (B) Food poisoning  
(C) Urinary Tract Infection (D) Pharyngitis
196. Dental stone and plaster differ mainly in:  
(A) Solubility (B) Shelf life  
 (C) Chemical formula (D) Particle size and porosity
197. Binder in the investment materials is:  
(A) Gypsum  (B) Quartz  
(C) Silica (D) Water
198. Which wax is used to form a base to pour a gypsum model?  
 (A) Boxing wax (B) Pattern wax  
(C) Sticky wax (D) Baseplate wax
199. Initial setting time is measured by:  
 (A) loss of gloss (B) At the end of exothermic reaction  
(C) Change in colour (D) none of the above
200. Which cement shows exothermic reaction during mixing:  
(A) Glass ionomer cement (B) Resin cement  
 (C) Zinc phosphate (D) Calcium hydroxide