

MANIPAL UNIVERSITY**FIRST BDS DEGREE EXAMINATION – MAY 2008****SUBJECT: DENTAL MATERIALS (ESSAY)**

Monday, May 26, 2008

Time: 14:20 – 17:00 Hours

Maximum Marks: 80

1. Classify ceramics. Write about condensation and firing (baking) procedure of porcelain jacket crown.

(2+4+4 = 10 marks)

2. Write short notes on:

- 2A. Measurement of working and setting time in elastomers.
2B. Composition and desirable properties of inlay pattern waxes.
2C. Gaseous porosities in dental alloys.
2D. Corrosion of amalgam.
2E. Composition, advantages and disadvantages of Poly carboxylate cement
2F. Measurement of colour.
2G. Duplicating materials
2H. Plasticizers.
2I. Yield strength.
2J. Fluid resin technique of denture base resin.

(5×10 = 50 marks)

3. Write brief answers:

- 3A. Define stress and maximum flexibility.
3B. Define cast and die.
3C. Flute or chip area in dental burs.
3D. Humectants in dentifrices.
3E. Define degree of polymerization.
3F. Any four requirements of luting cements.
3G. Applications of annealing in dentistry.
3H. Any four advantages of gypsum bonded investment.
3I. Desirable properties of orthodontic wires.
3J. Functions of coupling agent.

(2×10 = 20 marks)



MANIPAL UNIVERSITY**FIRST BDS DEGREE EXAMINATION – NOV/DEC 2008****SUBJECT: DENTAL MATERIALS (ESSAY)**

Monday, December 01, 2008

Time: 14:20 – 17:00 Hours

Maximum Marks: 80

1. Classify impression materials. Describe the composition, Setting reaction, Manipulation, Merits and Demerits of Irreversible hydrocolloid impression materials.

(2+2+2+2+1+1 = 10 marks)

2. Write Short notes on:

- 2A. Coefficient of thermal expansion.
- 2B. Self cure acrylic resins.
- 2C. Fluxes used in soldering.
- 2D. Galvanic corrosion.
- 2E. Phosphate bonded investment material.
- 2F. Acid etching technique.
- 2G. Composition and biological considerations of Zinc poly carboxylate cement.
- 2H. Delayed expansion.
- 2I. Firing of dental ceramics.
- 2J. Casting machines.

(5×10 = 50 marks)

3. Write short answers to the following:

- 3A. Requirements of die materials.
- 3B. Rake angle.
- 3C. Internal and External plasticizers.
- 3D. Two applications for modulus of elasticity.
- 3E. Any two factors affecting the rate of abrasion.
- 3F. Composition of zinc phosphate cement.
- 3G. Sensitization of 18 – 8 stainless steel.
- 3H. Functions of casting ring liners.
- 3I. Conditions for complete solid solubility.
- 3J. Classification of dental waxes.

(2×10 = 20 marks)

