

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

FIRST BDS DEGREE EXAMINATION – MAY 2005**SUBJECT: DENTAL MATERIALS (ESSAY)**

Monday, May 30, 2005

Time: 14:20 – 17:00 Hours

Maximum Marks: 80

≠ DRAW DIAGRAMS AND FLOW CHARTS WHEREVER APPROPRIATE

1. Define/Explain tarnish and corrosion. Explain with dental examples galvanic corrosion, stress corrosion and concentration cell corrosion. How do you minimize corrosion?

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

2. Write short notes on:

2A. Reline and Multimix techniques of impression making

2B. Cold mould seal

2C. Composition, setting reaction of alginate

2D. Compressive moulding technique of denture base

2E. Thermal expansion and conductivity

2F. Resilience

(5×6 = 30 Marks)

3. Classify glass ionomer cement with uses. Give its composition, setting reaction and bonding with tooth structure.

(4+2+2+2 = 10 marks)

4. Write short notes on:

4A. Mercury hazards and precautions

4B. Annealing

4C. CAD-CAM ceramics

4D. Ni-Ti wire

4E. Processing waxes

4F. Composition of composites

(5×6 = 30 marks)



Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

FIRST BDS DEGREE EXAMINATION – JULY/AUGUST 2005

SUBJECT: DENTAL MATERIALS (ESSAY)

Monday, August 01, 2005

Time: 14:20 – 17:00 Hours

Maximum Marks: 80

≠ DRAW DIAGRAMS AND FLOW CHARTS WHEREVER APPROPRIATE

1. Define stress and strain. Explain with example modulus of resilience, impact strength and fatigue strength.

(1+3+3+3 = 10 marks)

2. Write short notes on:

- 2A. Fluxes and antfluxes in soldering
- 2B. Galvanic corrosion
- 2C. Impression making using agar
- 2D. Composition and setting reaction of polyethers
- 2E. Tissue conditioners
- 2F. Maxillofacial materials

(5×6 = 30 marks)

3. Classify dental cements according to their applications. Give the composition and manipulation of zinc phosphate cement.

(5+3+2 = 10 marks)

4. Write short notes on:

- 4A. Trituration
- 4B. Composition and properties of hybrid composites
- 4C. Classification and ideal requirements of inlay pattern wax
- 4D. Chemical and thermal tempering of ceramics
- 4E. Removal of wax in casting procedure
- 4F. Coring and homogenization.

(5×6= 30 marks)

