

# DENTAL MATERIAL SCIENCE

**NOV-DEC 2007**

Total Duration Section A+B + C = 3 Hours

Section B & C Marks : 40

## **SECTION B**

SAQ

2) Answer the following (Any five out of six) :  
(5x2=10)

- a) Define ductility and malleability.
- b) What is the role of chromium in chrome-cobalt alloys
- c) Give the composition of Dental porcelains.
- d) Enumerate the various dental investments with their uses.
- e) Define Hooke's law.
- f) Define metamerism.

LAQ

3) Long Answer Question : (1x10=10)

a) Classify dental waxes. Give uses, ideal requirements and ADA classification of inlay casting wax.

OR

SAQ

b) Write short answers : (5x2=10)

i) Compare and contrast self cure and heat cure denture base resin.

ii) Give the types and uses of dental solders.

### **SECTION C**

(Conservative Dentistry)

SAQ

4) Answer the following (any five out of six) :

(5x2=10)

a) Manipulation of Glass Ionomer cement and zinc phosphate cement.

b) Enumerate casting defects.

c) Zinc oxide Eugenol cements.

d) Composition and role of each ingredient of conventional silver alloys.

e) Cermet cements.

f) Corrosion and its types.

LAQ (1×10=10)

5) a) What are composites ? Classify Composites. Write note on light cure Composites. What are bounding agents and coupling agents

OR

(5×2=10)

b.

i) Enumerate different materials which can be used as base materials.

Write composition and setting reaction of glass ionomer cement.

ii) Name Posterior restorative materials. Write in detail about manipulation, condensation, burnishing and carving of silver amalgam restoration.

