

**BACHELOR OF DENTAL SURGERY (2008 COURSE)**  
**SECOND - B.D.S. : WINTER :- 2021**  
**SUBJECT: DENTAL MATERIALS**

**Day : Saturday**  
**Date 19-Mar-2022**

**W-5756-2021**

**Time : 09:00 AM-12:00 PM**  
**Max. Marks: 70**

**N.B.**

- 1) All Questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

**SECTION-I**

- Q.1** Long Essay Questions :(Any **ONE**) **(10)**
- a) What are the ideal requirements of Impression materials? Write the composition, properties and uses of impression compound.
  - b) Classify Denture base resins. Give the composition of heat cure resins. Explain in detail the compression molding technique.
- Q.2** Short Essay Questions: (any **THREE**) **(15)**
- a) Write a note on factors controlling the setting time of gypsum products.
  - b) Write a note on inlay casting wax.
  - c) Define dies and enumerate the various die materials used in dentistry.
  - d) Steps in casting procedure.
- Q.3** Short answer Questions:(Any **FIVE**) **(10)**
- a) Define metamerism.
  - b) Differentiate between ductility and malleability.
  - c) Imbibition and Syneresis.
  - d) Composition of zinc-oxide impression paste.
  - e) Enumerate various dental implant materials.
  - f) Composition of dentifrice.

**SECTION-II**

- Q.4** Long Essay Questions :(Any **ONE**) **(10)**
- a) Classify luting cements. Write in detail about resin luting cements.
  - b) Describe the term composite resins. Classify dental composites. Discuss advantages, disadvantages, and steps in manipulation of dental composites.
- Q.5** Short Essay Questions: (any **THREE**) **(15)**
- a) High copper Amalgam.
  - b) Shape memory Alloys: Its composition, properties and types.
  - c) Write a note on direct filling gold.
  - d) Classify GIC and give its different applications.
- Q.6** Short answer Questions:(Any **FIVE**) **(10)**
- a) Define pickling and give its significance.
  - b) Define Adhesion and Cohesion.
  - c) Composition of Zinc -Phosphate cement.
  - d) Tarnish and corrosion.
  - e) Cavity liner and cavity varnish.
  - f) Soldering and welding.

\* \* \* \*