

### **Section-D**

**Note: Long answer questions. Attempt any two question out of three Questions.**  $(2 \times 8 = 16)$

- Q.23 Explain the technical aspects of metal-ceramic restorations.
- Q.24 Explain the properties and uses of dental cement.
- Q.25 Explain various surface finishing methods.

No. of Printed Pages : 4

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220453A

### **5th Sem./ Ceramic Subject : Bio and dental Ceramics**

Time : 3 Hrs.

M.M. : 60

### **SECTION-A**

**Note: Multiple Choice Questions. All Questions are compulsory.**  $(6 \times 1 = 6)$

- Q.1 They \_\_\_\_\_ is a key characteristic of bio inert ceramics?
- a) Are resorbed by the body
  - b) Do not react with body tissues
  - c) Bond directly with bone
  - d) Dissolved quickly in the body
- Q.2 \_\_\_\_\_ is primarily responsible for the bio active properties of bio ceramics?
- a) Alumina
  - b) Zirconia
  - c) Calcium phosphate
  - d) Magnesium oxide
- Q.3 \_\_\_\_\_ is used in bio ceramics for dental implants due to its toughness?
- a) Silica
  - b) Hydroxyapatite
  - c) Zirconia
  - d) Glass

- Q.4 \_\_\_\_\_ is the primary advantage of using ceramics in dental restorations?
- Flexibility
  - High compressive strength
  - Low hardness
  - Low thermal expansion
- Q.5 \_\_\_\_\_ property of the dental ceramics mimic the natural tooth enamel?
- High fracture toughness
  - Optical translucency
  - Low hardness
  - High tensile strength
- Q.6 \_\_\_\_\_ is most commonly used for dental dentures.
- Zirconia
  - Porcelain
  - Lithium Disilicate
  - Alumina

### Section-B

**Note:** Objective/Completion type questions. All questions are compulsory.  $(6 \times 1 = 6)$

- Q.7 Dental ceramics is used due to its \_\_\_\_\_ (Low cost/  
High aesthetics and translucency)
- Q.8 Glazing in dental ceramics is done to increase \_\_\_\_\_  
(opacity/ esthetics & smoothness)

- Q.9 Surface finishing in dental ceramics is done to improve \_\_\_\_\_ (aesthetics/Surface roughness)
- Q.10 \_\_\_\_\_ is most used in the metal-ceramic restorations in dentistry. (Titanium/Gold)
- Q.11 \_\_\_\_\_ alloy is good corrosion resistant. (Nickel-Chromium/ Cobalt-Chromium)
- Q.12 Metal alloys coating with ceramics is done to \_\_\_\_\_.  
(Reduce weight/ prevent corrosion)

### Section-C

**Note:** Short answer type Question. Attempt any eight questions out of Ten Questions.  $(8 \times 4 = 32)$

- Write the properties of bio ceramics which make it suitable for used it in medical applications.
- Describe ceramic Implants used in human body.
- Enlist the physical properties of dental ceramics.
- Describe the tooth structure along with its parts.
- Define the term agar and alginate.
- Definition of abrasive and give its types.
- Describe the dentures and its types.
- Differentiate between the dental plaster and dental stone.
- Define the cavity liner and its application.
- Define and classify dental cement.