

- Q.15 Enlist the ceramic implants used in human body.
- Q.16 Write the biological requirement of bioceramics .
- Q.17 Define the term dentures.
- Q.18 Describe tooth structure & explain parts
- Q.19 Define polishing and give stages of polishing.
- Q.20 Explain the properties of impression materials.
- Q.21 Write the advantages of ceramic and metal ceramics restorations.
- Q.22 Write the various properties of dental ceramics.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)
- Q.23 Write the various application of bioceramics.
- Q.24 Explain in detail properties of dental ceramics.
- Q.25 Explain the raw materials and composition Dental porcelain.

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5th Sem. / Ceramic Engineering

Subject : Bio and Dental Ceramics

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 _____ is a disadvantage of using bioceramics in medical applications ?
- High Corrosion rates
 - Brittleness leading to potential fracture
 - Poor biocompatibility
 - Excessive flexibility
- Q.2 Bio ceramics are used to replace or repair which type of body tissue ?
- Nervous tissue
 - Bone tissue
 - Muscle tissue
 - Skin tissue

Q.3 _____property of bioceramics makes them suitable for dental implants ?

- a) High electrical conductivity
- b) Biocompatibility
- c) Thermal insulation
- d) Magnetic properties

Q.4 _____ is a significant disadvantage of dental ceramics ?

- a) High biocompatibility
- b) Brittleness
- c) Low thermal conductivity
- d) Ease of fabrication

Q.5 Dental ceramics are primarily composed of _____

- a) Silica -based materials
- b) Metals
- c) Polymers
- d) Calcium phosphate

Q.6 Dental ceramic dentures are preferred for their biocompatibility due to their _____property.

- a) Thermal conductivity
- b) Chemical inertness
- c) High elasticity
- d) None of the above

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SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Alumina is added in dental ceramics is to Improve.(fracture toughness/wear resistance)

Q.8 ___is most commonly used material in the fabrication of dental ceramics.(Zirconia/Gold)

Q.9 ___method used to strengthen ceramic dental restorations.(Sintering/Etching)

Q.10 Zirconia is used in dentistry due to its _____.(High translucency High fracture toughness)

Q.11 Glazing is done to improve the _____ of dental ceramics. (smoothness/appearance)

Q.12 _____ is biocompatible and commonly used for dental implants. (Gold/Titanium)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Define the term bioceramics ?

Q.14 Enlist raw materials used in manufacturing of bioceramics.

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