

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE- SEMESTER-V (NEW) EXAMINATION – WINTER 2020**

**Subject Code:3153902**

**Date:01/02/2021**

**Subject Name:Nano Ceramic And Applications**

**Time:10:30 AM TO 12:30 PM**

**Total Marks: 56**

**Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

**MARKS**

<b>Q.1</b>	(a) Describe Properties of Nano Composites	<b>03</b>
	(b) Describe Applications of Oxide and Non-Oxide Ceramics.	<b>04</b>
	(c) Write a short note on Ceramic Materials.	<b>07</b>
<b>Q.2</b>	(a) Mention Applications of Transparent Ceramics.	<b>03</b>
	(b) Describe Bio-Compatible Ceramic Material.	<b>04</b>
	(c) Write a short note on Transparent Ceramic Materials.	<b>07</b>
<b>Q.3</b>	(a) Define Advanced Ceramic Armour.	<b>03</b>
	(b) Explain slip Casting Technique.	<b>04</b>
	(c) Write a short note on Fabrication of Nanocomposite.(Preparation)	<b>07</b>
<b>Q.4</b>	(a) Define Composite Based Transparent Ceramics.	<b>03</b>
	(b) Mention and Explain Properties of Oxide Ceramics.	<b>04</b>
	(c) Explain Role and Importance of Nano Ceramics for Future Technology	<b>07</b>
<b>Q.5</b>	(a) Explain the Non Stochiometric in ceramics.	<b>03</b>
	(b) Describe Fabrication and Properties of Amorphous Ceramic.	<b>04</b>
	(c) Write a short note on Advanced Ceramics.	<b>07</b>

<b>Q.6</b>	<b>(a)</b> Describe Blow Molding and Hardening Process.	<b>03</b>
	<b>(b)</b> Explain Properties of Nano Ceramics.	<b>04</b>
	<b>(c)</b> Explain Future Scope of Advanced Ceramic Material.	<b>07</b>
<b>Q.7</b>	<b>(a)</b> Define Nano Composite having Ceramic Matrix.	<b>03</b>
	<b>(b)</b> Briefly Explain Properties and Preparation of Transparent Ceramics.	<b>04</b>
	<b>(c)</b> Differentiate Between Oxide and Non-Oxide Ceramics (on Bases of Properties, Applications, etc.)	<b>07</b>
<b>Q.8</b>	<b>(a)</b> Define Glass Ceramic and Tempered Glass.	<b>03</b>
	<b>(b)</b> Briefly Describe Preparation Technique of Nano Ceramics	<b>04</b>
	<b>(c)</b> Mention and Explain Applications of Amorphous Ceramic	<b>07</b>

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