

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

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

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