Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## **BE - SEMESTER-VIII • EXAMINATION – SUMMER 2014**

-		Code: 182103 Date: 27-05-2014	
•	e: 10	Name: Composite Material 0:30 am TO 01:00 pm Total Marks: 70	
mstru	1. 2.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a)		07
	<b>(b)</b>	terms of advantages, characteristics and applications.  What is Dispersion strengthening composite? Discuss the characteristics and uses of TD-Nickel.	07
Q.2	(a) (b)	What do you mean by reinforcement in composite? With neat sketch describe the following reinforcements:  (i) Particulates (ii) Flakes	07 07
		OR	
	<b>(b)</b>	Give role of matrix and reinforcement in a composite material. Describes various properties of materials making them suitable to use as matrix materials & reinforcing material.	07
Q.3	(a) (b)	What are the particle reinforcement composites? Give examples and describe their properties and applications.	07 07
		OR	
Q.3	(a)	What is critical fiber length? Distinguish between Optimal, Short & Continuous size fibers.	07
	<b>(b)</b>	Briefly describe Sandwich Panels and explain prime reason for fabricating these structural composites.	07
Q.4	(a)	Illustrate "Hybrid" composite with suitable examples. List advantages of hybrid composites over normal fiber composites.	07
	<b>(b)</b>		07
Q.4	(a)		07
	(b)	-	07
Q.5	(a) (b)		07 07
Q.5	(a)		07
•	(b)		07

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