Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII EXAMINATION - WINTER 2015

	•	t Code: 173404 Date:07/12/2015 t Name: Design for Manufacture, Assembly and Environment	
Ti	-	10:30am to 1:00pm Total Marks: 70	
IIIS	1 2	. Attempt all questions.	
Q.1	(a) (b)	Explain the need of implementing DFMA. How will you apply DFMA for plastic product?	0': 0':
Q.2	(a) (b)	Explain the application of the DFA Methodology. Explain the selection of manufacturing process.	0′: 0′:
		OR	
	(b)	Explain the significance of tolerances in manufacturing.	0'
Q.3	(a) (b)	Explain the design guidelines for manual assembly. Explain the form design of welded members.	0' 0'
		OR	
Q.3	(a) (b)	Discuss undesirable design features for machining. Explain design for clampability and accessibility.	0'. 0'.
Q.4	(a) (b)	Explain the design rules for parts separation. How will you determine optimum number of cavities?	0′: 0′:
		OR	
Q.4	(a) (b)	Discuss die casting cycle time estimation. What are the general considerations for linking CAD and DFMA?	0′. 0′.
Q.5	(a) (b)	Write about the principles of design for environment. Write about design for recyclability.	0' 0'
Q.5	(a) (b)	OR What is environmentally responsible product? Explain. Explain product life-cycle management.	0' 0'
