Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME- SEMESTER II - EXAMINATION - SUMMER 2015

Subject Code: 2722410 Subject Name: Additives and Compounding Time: 2:30 PM - 5:00 PM Instructions: Date:28/05. Total Mark)5/ 2015	
		: 70	
Insti	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)		07 07
Q.2	(a)	Explain the various steps involved in compounding process of plastics by Banbury mixer.	07
	(b)	Write down the name of the plastics, used very frequently for food packaging and medical applications?	07
		OR	
	(b)	Write short notes on: (1) Flame retardants (2) Blowing agents	07
Q.3	(a)	Defines & Give Examples (a) Fillers (b) Pigments (c) Plasticizers and (d) Stabilizers	07
	(b)	Describe in detail the various additives used for recycling of plastics. OR	07
Q.3	(a)	Explain in detail about the Flame Retardants and its working. List the main types of Flame Retardant Additives with its mechanism and Technical comments	07
	(b)	What do you understand by lubricants? What are the types of lubricants, give examples, and describe each in short?	07
Q.4	(a)	Write a short note on mixing and mixing equipments and there requirements, used for compounding of plastics?	07
	(b)	What is compounding of plastics and what are the various methods of compounding? With the help of a neat diagram, explain the working of a high-speed mixer used for compounding? OR	07
Q.4	(a)	What is compounding of plastics and what are the various methods of compounding? With the help of a neat diagram explain the working and principle of a Twin Screw extruder, used for compounding?	07
	(b)	List the various Heat Stabilizer Polymers? Discuss the Antioxidants in detail	07
Q.5	(a)	Explain the differences between reinforcing agent and filler.	07
v.	(b)	•	07
Q.5	(a)		07
~.	(b)		07
