Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E –IIst SEMESTER–EXAMINATION – JULY- 2012

Subject code: 1724006 **Date: 12/07/2012**

Subject Name: Speciality Elastomers & its Technology

Time: 10:30 am – 13:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	**Discuss in detail about Chlorinated NR.**	**(07)**
	(b)	**Write the properties & uses of Hydrohalogenated NR.**	**(07)**
Q.2	**(a)**	**Discuss the advantages of Polymethyl methacrylate grafted NR.**	**(07)**
	(b)	**Short note on mixing effects in fibre orientation.**	**(07)**
		OR	
	(b)	**List the methods for the analysis of Fiber orientation. Write any two in detail.**	**(07)**
Q.3		**"Hydrogenation of Synthetic Elastomers is an excellent example of a Chemical modification process." Justify the statement in detail.**	**(14)**
		OR	
Q.3		**Discuss in detail about the Tetrafluoroethylene-Propylene Elastomers.**	**(14)**
Q.4		**Write about the basic structure & method of production for Acrylic-Based Elastomers.**	**(14)**
		OR	
Q.4		**Discuss in detail about the applications of Acrylic based Elastomers.**	**(14)**
Q.5	**(a)**	**Short note on Compounding & Mixing of Cross-linked Polyethylene.**	**(07)**
	(b)	**Write in detail about Properties & applications of Cross-linked Polyethylene.**	**(07)**
		OR	
Q.5		**Explain in detail about Basic Structure of Cross -linked Polyethylene.**	**(14)**

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