Seat N	o.:		
	]	GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-VII • EXAMINATION – SUMMER • 2015	
Subject Code: 172306 Date:06/0		de: 172306 Date:06/05/2015	
Subje	ct Naı	ne: Adhesives and Sealant (Dpt. Elect-1)	
		pm-05.00pm Total Marks: 70	
Instruc			
_		npt all questions.	
2. 3.		e suitable assumptions wherever necessary. es to the right indicate full marks.	
3.	rigui	es to the right indicate run marks.	
Q.1	(a)	Discuss the general conditions in Adhesive selection. Give the basic steps in Adhesive selection process.	07
	<b>(b)</b>	Explain the general precautions in preparing and testing the Adhesive bonded joints.	07
Q.2	(a)	Write short notes on (1) Adhesives for wood bonding. (2) Adhesives for	07
		Plastics and Glass bonding and (3) Adhesives for Paper bonding.	
	<b>(b)</b>	Discuss Animal glue as Adhesive. Give its testing methods and applications	07
		OR	
	<b>(b)</b>	For the adhesives in Packaging application, give details of its use, type of adhesives, major requirement and accepting adhesive base.	07
Q.3	(a)	Discuss the raw materials and types of natural rubbers for Rubber Adhesives.	07
	<b>(b)</b>	Discuss Butyl Rubber and Poly isobutylene as synthetics rubber Adhesives	07
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0.2	(2)	OR	
Q.3	(a) (b)	Explain about the Casein and Protein based glues and wood adhesives. How the modification of starch and other additives can change the properties of Dispersion? Explain it by help of figures.	
Q.4	(a)	Give a list of Polymer Back-bone, its functional end use groups and its uses	07
	<b>(b)</b>	List the various Acrylic Adhesives and its functional end uses OR	07
Q.4	(a) (b)	Discuss in detail about the advantages of Adhesive Bonding List the various types, applications and settings of Adhesives. Explain the cooling of thermoplastics adhesive in detail.	
Q.5	(a)	Give complete classification of Organic and Semi-organic Adhesives, according to its origin.	07
	<b>(b)</b>	Explain about the various Hybrids and Coupling Agents used in Adhesives	07
		OR	

(a) Write in detail about various remedies that will lessen the danger of failure 07

**07** 

of matching adhesive to adherent.

(b) Discuss various Starch Adhesives and its applications.

Q.5