Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.Pharm Sem3 rd Remedial Examination May 2011

Subject code: 230001 **Subject Name Physical Pharmaceutics-II**

Date:18/05/2011 **Time : 10.30a.m. – 01.30 p.m.**

Instructions: **Total Marks: 80**

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

Q.1	**(a)**	Explain in brief 'Ideal' & 'Real' solutions. Also explain Rault's law for Ideal solution with diagram for vapor-pressure composition curve for an ideal binary system.	**06**
	(b)	Describe in brief various colligative properties of substance. Discuss in brief how various colligative propertities can be used to calculate	**05**
	(c)	molecular weight of non-electrolytes.	**05**
Q.2	**(a)**	Describe Arrhenius theory of electrolytic dissociation.	**06**
	(b)	Discuss in brief properties of solutions of electrolytes.	**05**
	(c)	Explain in brief, (1)The L value (2) Osmolality	**05**
Q.3	**(a)**	Classify various types of complexes.	**06**
	(b)	Discuss in brief various drug complexes.	**05**
	(c)	Write in brief about polymer complexes and inclusion compounds.	**05**
Q.4	**(a)**	Describe Apparent Zero-order kinetics with example.	**06**
	(b)	Explain in brief 'First-Order' and pseudo first order reactions.	**05**
	(c)	A solution of drug contained 500 units per ml when prepared. After 40 days it was found to contain 300 units per ml. Assuming first-order , find when the drug will have to decomposed to half its original concentration.	**05**
Q.5	**(a)**	Discuss Steady-State Diffusion.	**06**
	(b)	Discuss Dissolution and Disintegration of drug from solid dosage forms.	**05**
	(c)	Write in brief on release of drug from various types of dosage forms	**05**
Q.6	**(a)**	Define various types of polymers.	**06**
	(b)	Describe Pharnaceutical applications of polymers**.**	**05**
	(c)	Write a note on preparations of Polymer solutions	**05**
Q.7	**(a)**	Write a note on preparations of Polymer solutions	**06**
	(b)	Briefly explain various methods to determine the order of reactions.	**05**
	(c)	Discuss in brief influence of temperature and PH on reaction rate**.**	**05**

****