Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## B.Pharm - SEMESTER-II • EXAMINATION - SUMMER 2017

Subject code: 220003 Date: 07/ Subject Name: Pharmaceutical Chemistry – II		)6/2017	
	_	: 10:30 AM to 01:30 PM Total Marks:	80
	1. 2.	ctions: Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	•	06 05
	(c)	Give methods to determine order of reactions.	05
Q.2	(a) (b) (c)	Distinguish between isothermal and adiabatic process.	06 05 05
Q.3	(a)	Explain the relation between elevation of boiling point and lowering of vapour pressure. Derive an equation for determination of molecular mass from elevation of boiling point.	06
	(b) (c)	What is the basic principle of Joule-Thomson effect?	05 05
Q.4	(a)	Define radioactivity. Explain methods for detection and measurement of radioactive radations.	06
	(b) (c)	Explain second order kinetic reaction and derive an integrated rate equation for it. Explain Langmuir theory of adsorption.	05 05
Q.5	(a)	State the phase rule. Describe the derivation of the phase rule from thermodynamic considerations.	06
	(b)	Explain the Rast's camphor and Beckmann's method for measurement of depression of freezing point.	05
	(c)	Give pharmaceutical applications of radioactive isotopes.	05
Q. 6	(a) (b) (c)	Define viscosity. Describe measurement of viscosity by Ostwald Method.	06 05 05
Q. 7	(a) (b) (c)	Explain types of radioactive decay, rate of radioactive decay and half life.	06 05 05

\*\*\*\*\*