Seat No:_____

PARUL UNIVERSITY FACULTY OF APPLIED SCIENCE M.Sc., Winter 2017-18 Examination

Enrollment No:_____

Instructions: 1. All questions are compulsory. 2. Figures to the right indicate full marks. 3. Make suitable assumptions wherever necessary. 4. Start new question on new page. (08) a. Give names of various methods of polymerization. Discuss any two methods in detail. (08) b. Enlist names of various methods of polymerization. Discuss anyone in detail. (04) (a) Do as directed: (04) (a) Do as directed: (04) (b) Write a note on ideal gas equation. (04) (c) Write a note on Maxwell distribution hav for molecular velocity. (04) (c) Write a note on Maxwell distribution hav for molecular velocity. (04) (c) Write a note on Dayle's law. (04) (c) Write a note on Dayle's law. (04) (c) Write a note on Dolyster and polyamide. (04) (c) Do as directed: (Each of 01 marks) (03) (d) Do as directed: (Each of 01 marks) (03) (e) Write a note on polyster and polyamide. (04) (f) Write a note on notacity: (03) (0) (g) Do as directed: (Each of 01 marks) (03) (g) Do as directed: (Each of 04 marks) (03) (g) Do as directed:	Semester: 1Date: 2Subject Code: 11205103Time: 0Subject Name: Physical Chemistry - 1Total 1		Date: 22 /12/2017 Fime: 02:00 pm to 04:30 pm Total Marks: 60
 All questions are compulsory. Figures to the right indicate full marks. Make suitable assumptions wherever necessary. Start new question on new page. (Q1. A) Answer the following questions (Each of 04 marks) a. Give names of various methods of polymerization. Discuss any two methods in detail. b. Enlist names of various mechanisms for polymerization. Discuss anyone in detail. (a) Do as directed: (b) Do as directed: (c) (c) Write a note on classification of polymerization. (c) Write a note on classification of polymerization. (c) Write a note on classification of polymerization. (c) Write a note on Bayle's law. (d) Do as directed: (Each of 02 marks) (d) Write a note on Dolyel's law. (e) Write a note on charle's law. (f) Write a note on polymerization. (g) Do as directed: (Instruc	tions:	
 2. Figures to the right indicate full marks. 3. Make suitable assumptions wherever necessary. 4. Start new question on new page. (08) a. Give names of various methods of polymerization. Discuss any two methods in detail. b. Enlist names of various methods of polymerization. Discuss anyone in detail. (a) Do as directed: (b) Write a note on ideal gas equation. (c) Write a note on ideal gas equation. (d) Oas directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Nitrie a note on Charle's law. (e) Write a note on Charle's law. (f) Write a note on Oplyster and polyamide. (f) Write a note on polyster and polyamide. (g) Do as directed: (Each of 02 marks) (g) Do as directed: (Each of 02 marks) (g) Do as directed: (Carl of 02 marks) (g) Do as directed: (Gat of 02 marks) (g) Do as directed: (Gat of 02 marks) (g) Write a note on polyster and polyamide. (g) A Answer the following questions (Each of 04 marks) (g) Write a note on tacticity. (g) A Answer the following questions (Each of 04 marks) (g) Write a note on tacticity. (g) A Answer the following questions (Each of 04 marks) (g) A Answer the following questions (Each of 04 marks) (g) B Answer the following questions (Each of 04 marks) (g) A Answer the following questions (Each of 04 marks) (g) B Answer the following questions (Each of 04 marks) (g) A Marker the following questions (Each of 04 marks) (g) B Answer the following questions (Each of 0	1. All q	uestions are compulsory.	
 Make suitable assumptions wherever necessary. Start new question on new page. (a) Answer the following questions (Each of 04 marks) (08) a. Give names of various methods of polymerization. Discuss any two methods in detail. b. Enlist names of various methods of polymerization. Discuss anyone in detail. (a) Do as directed: (04) (b) Write a note on ideal gas equation. (c) Discuss Avogadro's law. (d) Write a note on classification of polymerization. (d) O(4) (c) Write a note on classification of polymerization. (d) O(4) (c) Write a note on classification of polymerization. (d) O(4) (c) Write a note on classifications. (a) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Uwrite a note on Polyester and polyamide. (d) Write a note on polyester and polyamide. (d) Write a note on polyester and polyamide. (d) Do as directed: (Each of 01 marks) (d) Do as directed: (Each of 04 marks) (d) Do as directed: (Each of 04 marks) (d) Do as directed: (Each of 04 marks) (d) Write a note on postulates of kinetic theory of gases. (d) Write a note on surface tension. (e) Write a note on surface tension. (f) Write a note on surface tension. (g) Mrise anote on surface tension. (h) Define first order reaction and discuss about it. (g) A Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (d) D as directed: (Each of 02	2. Figu	res to the right indicate full marks.	
 4. Start new question on new page. (21. A) Answer the following questions (Each of 04 marks) (08) a. Give names of various methods of polymerization. Discuss any two methods in detail. b. Enlist names of various methods of polymerization. Discuss anyone in detail. (a) Do as directed: (as a for 0 as equation. c) Discuss Avogadro's law. (b) Write a note on ideal gas equation. c) Write a note on Maxwell distribution law for molecular velocity. (c) Write a note on Boyle's law. (d) Do as directed: (Each of 02 marks) (d) 1. Write a note on Boyle's law. 2. Write a note on Boyle's law. 2. Write a note on polyester and polyamide. (d) 1. Write a note on polyester and polyamide. (d) 1. Write a note on polyester and polyamide. (d) 1. Define polymerization. (a) Do as directed: (Each of 02 marks) (b) Write a note on polyester and polyamide. (c) Write a note on polyester and polyamide. (d) 2. A) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Write a note on postulates of kinetic theory of gases. (c) Write a note on surface tension. (b) Write a note on surface tension. (c) Write a note on surface tension. (d) Write a note on surface tension. At wool (a) Do as directed: (Each of 02 marks) (b) Befine first order reaction and discuss about it. (c) Write a note on surface tension. At wool (d) Write a note on surface tension. Chart wool (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Do as directed: (Each of 02 marks) (e) Discuss that factors affecting the critical micelle concentration and micel	3. Mak	e suitable assumptions wherever necessary.	
Q.1. A) Answer the following questions (Each of 04 marks) (08) a. Give names of various methods of polymerization. Discuss any two methods in detail. (08) b. Enlist names of various methods of polymerization. Discuss anyone in detail. (04) (a) Do as directed: (04) (a) Do schreeted: (04) (b) Write a note on ideal gas equation. (04) (c) Write a note on Maxwell distribution law for molecular velocity. (04) (c) Write a note on Maxwell distribution law for molecular velocity. (04) (c) Write a note on Boyle's law. (04) (d) Do as directed: (Each of 02 marks) (04) (e) Write a note on Boyle's law. (04) (f) Write a note on polyester and polyamide. (04) (g) Do as directed: (Each of 01 marks) (03) (f) Do as directed: (Each of 01 marks) (03) (f) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on straface tension. (b) Write a note on straface tension. (c) Write a note on straface tension. (b) Write a note on straface tension. (c) (g) A) Answer the following questions (Apt two) (a) (a) (a) (a) (g) A) Answer	4. Start	new question on new page.	
(a) A kiewer the following question (Calculated of a marks) (b) (a) Caster and Section (Calculated of a marks) (c) (b) Enlist names of various methods of polymerization. Discuss any two methods in detail. (c) (c) D as directed: (c) (a) D as directed: (c) (b) Write a note on classification of polymerization. (c) (c) Write a note on classification of polymerization. (c) (c) Write a note on classification of polymerization. (c) (c) Write a note on classification of polymerization. (c) (d) D as directed: (Each of 02 marks) (d) (a) D as directed: (Each of 01 marks) (d) (d) Write a note on polyetser and polyamide. (d) (d) (e) Write a note on polyetser and polyamide. (d) (d) (e) Write a note on polyetser and polyamide. (d) (d) (e) Write a note on polyetser and polyamide. (d) (d) (f) D as directed: (Each of 01 marks) (d) (g) D as directed: (Each of 01 marks) (d) (g) Write a note on staticty. (d) (d) (g) Write a note on surface tension. (b) (d)	0	Answer the following questions (Feel of 04 ments)	(08)
 a. Give hanks of various mechanisms for polymerization. Discuss any two incluous in detail. (a) Do as directed: (a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	Q.1. A)	Answer the following questions (Each of 04 marks)	(00)
0. Emission inducts inclusions for polymetrization. Exclusion any one in detail. (a) Do as directed: (04) 1. Write a note on ideal gas equation. (04) 2. Discuss Avogadro's law. (04) (b) Write a note on Maxwell distribution law for molecular velocity. (04) (c) Write a note on Maxwell distribution law for molecular velocity. (04) (a) Do as directed: (Each of 02 marks) (04) (a) Do as directed: (Bach of 02 marks) (04) (b) Write a note on Doyle's law. (04) (c) Write a note on Charle's law. (04) (b) Write a note on polyester and polyamide. (04) (c) B Answer the following questions (Any two) (03) (a) Do as directed: (Each of 01 marks) (03) (c) Write a note on taticity. (03) (d) Answer the following questions (Any two) (a) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (2.3. A) Answer the following questions (Any two) (a) (a) Do as directed: (Each of 02 marks) (04) </td <td></td> <td>b Enlist names of various mechanisms for polymerization. Discuss any</td> <td>ne in detail</td>		b Enlist names of various mechanisms for polymerization. Discuss any	ne in detail
(a) Do as directed: (04) i) Write a note on ideal gas equation. (04) i) Write a note on classification of polymerization. (04) (c) Write a note on classification of polymerization. (04) (c) Write a note on classification of polymerization. (04) (c) Write a note on Maxwell distribution law for molecular velocity. (04) (a) Do as directed: (Each of 02 marks) (04) (b) Write a note on Dolyester and polyamide. (04) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: zero. (Each of 01 marks) (b) Write a note on polyester and polyamide. (04) (c) B Answer the following questions (Any two) (a) (a) Do as directed: zero. (Each of 01 marks) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on surface tension. (b) (b) Define first order reaction and discuss about it. (04) (2.3 B) Answer the following questions. (04) (a) Do as directed: (Each of 02 marks) (04) (a) De as directed: (Each of 02 marks) (04) (b) Define first order rea	$(1 \mathbf{R})$	Answer the following questions (Any two)	she in detail.
(a) Divide a note on ideal gas equation. (b) 1. Write a note on classification of polymerization. (c) (b) Write a note on Maxwell distribution law for molecular velocity. (04) (c) Write a note on Maxwell distribution law for molecular velocity. (04) (a) Do as directed: (Each of 02 marks) (04) (b) Write a note on Boyle's law. (04) (c) Write a note on charle's law. (04) (d) Do as directed: (Each of 01 marks) (04) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 04 marks) (03) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on surface tension. (b) Write a note on surface tension. (b) Define first order reaction and discuss about it. (2.3 B) Answer the following questions. (Any two) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (d) Do as directed: (Each of 02 marks) (04) (e) Discuss thaff theores affecting the critical micelle concentration and miceller size. (04)	Q.1. D)	(a) Do as directed:	(04)
 2. Discuss Avogadro's law. (b) Write a note on classification of polymerization. (c) Write a note on Maxwell distribution law for molecular velocity. (d) (c) Write a note on Maxwell distribution law for molecular velocity. (d) (d) Da as directed: (Each of 02 marks) (e) Write a note on Doyle's law. 2. Write a note on Doyle's law. 2. Write a note on polyester and polyamide. (b) Write a note on polyester and polyamide. (c) Write a note on polyester and polyamide. (d) (d) Da as directed: (Each of 01 marks) (d) (a) Do as directed: (Each of 01 marks) (d) (a) Do as directed: (Each of 01 marks) (d) (d) Do as directed: (Each of 04 marks) (d) (e) Write a note on surface tension. (b) Write a note on surface tension. (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) Write a note on surface tension. (d) Do as directed: (Each of 02 marks) (d) Nowswer the following questions (Each of 04 marks) (e) Bo as directed: (Each of 02 marks) (f) Define first order reaction and discuss about it. (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) What is the effect of temperature on reaction rates? (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (d) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) A Answer the following questions. (d) A Answer the following questions of surfactants? (d) Answer the following questions of surfactants? (d) Answer the following questions of surfactants? (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Answer the following questions of surfa		1 Write a note on ideal gas equation	(04)
(b) Write a note on classification of polymerization. (04) (c)Write a note on Maxwell distribution law for molecular velocity. (04) (a) Do as directed: (Each of 02 marks) (04) 1. Write a note on Boyle's law. (04) 2. Write a note on Charle's law. (04) (b) Write a note on Dayle's law. (04) (c) Write a note on Charle's law. (04) (d) Do as directed: (Each of 01 marks) (04) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (c) Write a note on polymetrization. (03) (03) (03) (c) Write a note on staticates of kinetic theory of gases. (03) (03) (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (04) (2.3 B) Answer the following questions (Any two) (a) (a) (a) (a) Do as directed: (Each of 02 marks) (04) (b) Define first order reaction and discuss about it. (04) (2.4 A) Answer the following questions. (04) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail.		2. Discuss Avogadro's law.	
(c)Write a note on Maxwell distribution law for molecular velocity. (04) (a) Do as directed: (Each of 02 marks) (04) (b) Write a note on Boyle's law. (04) (c)Write a note on Charle's law. (04) (c)Write a note on Obyle's law. (04) (c)Write a note on polyester and polyamide. (04) (c)Write a note on polyester and polyamide. (04) (d) Do as directed: (Each of 01 marks) (03) (e)Write a note on polyester and polyamide. (04) (f)Write a note on polyester and polyamide. (04) (g)Do as directed: (Each of 01 marks) (03) (f)Do as directed: (Each of 01 marks) (03) (g)Write a note on postulates of kinetic theory of gases. (03) (03) (g)A Answer the following questions (Each of 04 marks) (08) ((a) Write a note on surface tension. (b) (g)Do as directed: (Each of 02 marks) (04) (1) Discuss half life period. (04) (g)Do as directed: (Each of 02 marks) (04) (1) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (04) <td< td=""><td></td><td>(b) Write a note on classification of polymerization.</td><td>(04)</td></td<>		(b) Write a note on classification of polymerization.	(04)
Q.2. A) Answer the following questions. (04) (a) Do as directed: (Each of 02 marks) (04) 1. Write a note on Boyle's law. (04) 2. Write a note on polyester and polyamide. (04) (b) Write a note on polyester and polyamide. (04) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (b) Write a note on polyester and polyamide. (04) (c) Barder the following questions (Any two) (03) (c) Write a note on tacticity. (03) (c) Write a note on tacticity. (03) (a) Write a note on surface tension. (08) (a) Write a note on surface tension. (08) (a) Write a note on surface tension. (04) (b) Define first order reaction and discuss about it. (04) (2.3 B) Answer the following questions (Any two) (a) (a) Do as directed: (Each of 02 marks) (04) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (a) Do as directed: (Each of 02 marks) (04)		(c)Write a note on Maxwell distribution law for molecular velocity.	(04)
(a) Do as directed: (Each of 02 marks) (04) 1. Write a note on Boyle's law. (b) Write a note on Ohyelest and polyamide. (04) (b) Write a note on Charle's law. (03) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on tacticity. (03) (a) Write a note on surface tension. (b) Befine first order reaction and discuss about it. (c) Answer the following questions (Any two) (a) (a) Do as directed: (Each of 02 marks) (04) (b) Define first order reaction and discuss about it. (04) (c) Discuss half life period. (b) Define first order measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (d) A Answer t	Q.2. A)	Answer the following questions.	~ /
1. Write a note on Boyle's law. 2. Write a note on Charle's law. (b) Write a note on polyester and polyamide. (04) Q.2. B) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (03) 1. Define polymerization. 2. State Graham's law of diffusion. 3. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (03) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (04) (b) Define first order reaction and discuss about it. (c) Discuss half life period. (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Discuss half life period. (d) Write a note on classification of surfactants? (d) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks)		(a) Do as directed: (Each of 02 marks)	(04)
2. Write a note on Charle's law. (04) (b) Write a note on polyester and polyamide. (04) (a) Do as directed: (Each of 01 marks) (03) 1. Define polymerization. (03) (03) 2. State Graham's law of diffusdion. (03) (03) 3. Write the formula for number average molecular weight (Mn). (03) (c) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on surface tension. (03) (a) Do as directed: (Each of 04 marks) (08) (a) Do as directed: (Each of 02 marks) (04) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss half life period. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (d) Answer the following questions. (04)		1. Write a note on Boyle's law.	
(b) Write a note on polyester and polyamide. (04) Q2. B) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (03) 1. Define polymerization. 2. State Graham's law of diffusdion. 3. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on nacticity. (03) (a) Answer the following questions (Each of 04 marks) (08) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q3. B) Answer the following questions (Any two) (04) (a) Do as directed: (Each of 02 marks) (04) (a) Do as directed: (Each of 02 marks) (04) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the following questions. (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (b) Mich are the applications of surfactants? (c) Define Monomer and micellisation 		2. Write a note on Charle's law.	
Q.2. B) Answer the following questions (Any two) (Each of 01 marks) (03) (a) Do as directed: (Each of 01 marks) (03) 1. Define polymerization. 2. State Graham's law of diffusdion. (03) 3. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on tacticity. (03) (a) Answer the following questions (Each of 04 marks) (08) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q.3. B) Answer the following questions (Any two) (04) (a) Do as directed: (Each of 02 marks) (04) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (d) Answer the following questions. (04) (a) Do as directed: (Each of 02 marks) (04) (b) Write a note on classification of surfactants? (04) (c) Discuss the following questions (Any two) (04) (d) Answer the following questions (Any two) (04) (a) Do as directed: (Each of 02 marks) (04) (b) Write a note on classif		(b) Write a note on polyester and polyamide.	(04)
 (a) Do as directed: (Each of 01 marks) (03) Define polymerization. State Graham's law of diffusdion. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on tacticity. (03) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (a) B Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Write a note on classification of surfactants? (d) Do as directed: (Each of 02 marks) (e) Discuss the following questions. (f) Enlist various methods for measuring surface tension. Discuss anyone in detail. (o) Da su directed: (Each of 02 marks) (f) Enlist various methods for measuring surface tension. Discuss anyone in detail. (o) Discuss the factors affecting the critical micelle concentration and miceller size. (o) Da as directed: (Each of 02 marks) (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants? (c) Discuss the following questions. (a) Do as directed: (Each of 01 marks) (b) Write a note on classification of surfactants? (c) Define Monomer and micellisation (b) Write a note on classification of surfactants (d) Do as directed: (Each of 01 marks) (d) Define homogeneous reaction. (d) Define homogeneous reaction. (d) Define homogeneous reaction. 	Q.2. B)	Answer the following questions (Any two)	
 Define polymerization. State Graham's law of diffusdion. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (c) Write a note on tacticity. (d) Write a note on surface tension. (b) Define first order reaction and discuss about it. (a) Newer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the following questions. (d) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 02 marks) (d) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Q4. A) Answer the following questions. (a) Do as directed: (Each of 02 marks) (d) Do as directed: (Each of 01 marks)		(a) Do as directed: (Each of 01 marks)	(03)
 2. State Graham's law of diffusion. 3. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (03) (c) Write a note on tacticity. (03) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q.3. B) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (e) Do as directed: (Each of 02 marks) (f4) (1. Define polymerization.	
 3. Write the formula for number average molecular weight (Mn). (b) Write a note on postulates of kinetic theory of gases. (c) Write a note on tacticity. (03) (a) Answer the following questions (Each of 04 marks) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q.3. B) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Answer the following questions. (a) Do as directed: (Each of 02 marks) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Q.4. A) Answer the following questions of surfactants? (a) Do as directed: (Each of 02 marks) (d) Nitch are the applications of surfactants? (d) Do as directed: (Each of 02 marks) (d) Write a note on classification of surfactants? (d) Do as directed: (Each of 01 marks) (d) Define homogeneous reaction. (d) Define homogeneous reaction. (d) Define micelle. (d) Micelle (d) Micelle with a note on sufface tension of micelles in a solvent is known as 		2. State Graham's law of diffusdion.	
 (b) Write a note on postulates of kinetic theory of gases. (c) Write a note on tacticity. (03) (a) Answer the following questions (Each of 04 marks) (b) Define first order reaction and discuss about it. (c) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) Base of the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Answer the following questions. (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (d) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Q.4. A) Answer the following questions. (a) Do as directed: (Each of 02 marks) (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants? (c) Define Monomer and micellisation (b) Write a note on classification of surfactants (d) Do as directed: (Each of 01 marks) (d) Define homogeneous reaction. (d) Define micelle. (d) Micelle (d) Micelle with a note on classification of micelles in a solvent is known as 		3. Write the formula for number average molecular weight (Mn).	
 (c) Write a note on facticity. (03) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q.3. B) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (d) Do as directed: (Each of 02 marks) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (f) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (g) Answer the following questions. (g) Do as directed: (Each of 02 marks) (g) Answer the following questions of surfactants? (g) Do as directed: (Each of 02 marks) (g) Write a note on classification of surfactants (g) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (b) Write a note on classification of surfactants (c) Discuss the following questions (Any two) (a) Do as directed: (Each of 01 marks) (b) Define homogeneous reaction. (c) Define micelle. (d) Do as directed: (Each of 01 marks) (d) Define homogeneous reaction. (d) Define homogeneous reaction. (d) Define micelle. (d) Assume the following questions of a dispersion of micelles in a solvent is known as (f) Miceller solution (h) miceller solution (h) more 		(b) Write a note on postulates of kinetic theory of gases.	(03)
 (d) Answer the following questions (Each of 04 marks) (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (Q.3. B) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) (d) (e) Do as directed: (Each of 02 marks) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Do as directed: (Each of 02 marks) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Do as directed: (Each of 02 marks) (e) Do as directed: (Each of 02 marks) (f) Write a note on classification of surfactants? (f) Define Monomer and micellisation (b) Write a note on classification of surfactants (f) Write a note on classification. (g) Do as directed: (Each of 01 marks) (h) Do as directed: (Each of 01 marks) (h) Define homogeneous reaction. (h) Define micelle. (h) Answer the following questions of micelles in a solvent is known as 		(c) Write a note on facticity.	(03)
 (a) Write a note on surface tension. (b) Define first order reaction and discuss about it. (c) Answer the following questions (Any two) (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (d) Q.4. A) Answer the following questions. (a) Do as directed: (Each of 02 marks) (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants? (c) Discuss the following questions (Any two) (a) Do as directed: (Each of 01 marks) (c) Discuss the following questions (Any two) (a) Do as directed: (Each of 01 marks) (c) Discuss the following questions (Any two) (a) Do as directed: (Each of 01 marks) (b) Write a note on classification. (c) Define micelle. (c) Discuss the factor sufficient of micelles in a solvent is known as 	Q.3. A)	Answer the following questions (Each of 04 marks)	(08)
 (b) Define first order reaction and discuss about it. (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d) (d) (e) Discuss the factors affecting the critical micelle concentration and miceller size. (f) (d) (g) Do as directed: (Each of 02 marks) (h) Enlist various methods for measuring surface tension. Discuss anyone in detail. (f) (d) (g) Discuss the factors affecting the critical micelle concentration and miceller size. (h) Enlist various methods for measuring surface tension. (h) Enlist various methods for measuring surface tension. (h) Enlist various methods for measuring surface tension. (h) Enlist various methods for measuring surface tension. Discuss anyone in detail. (h) Enlist various methods for measuring surface tension. (h) Write a note on classification of surfactants (h) Write a note on classification. (h) Write a note on classification. (h) Define homogeneous reaction. (h) Define homogeneous reaction. (h) Define homogeneous reaction. (h) Micelle (h) Micelle (h) Micelle aclution (h) Micelle aclution (h) Micelle aclution 		(a) write a note on surface tension. (b) Define first order reaction and discuss about it	
 (a) Do as directed: (Each of 02 marks) (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (d4) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (d4) (d4) (d4) (d4) (d5) (d4) (d4) (d4) (d4) (d5) (d4) (d4) (d4) (d4) (d5) (d6) (d7) (d8) (d8) (d8) (d9) (d9) (d1) (d2) (d2) (d2) (d3) (d4) (d4) (d5) (d5) (d6) <	03 B)	(b) Define first order feaction and discuss about it.	
 (a) Do as directed. (Each of 02 marks) 1. Discuss half life period. 2. What is the effect of temperature on reaction rates? (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the following questions. (a) Do as directed: (Each of 02 marks) (b) Which are the applications of surfactants? 2. Define Monomer and micellisation (b) Write a note on classification of surfactants (04) (05) (05) (06) (06) (07) (08) (08) (09) (10) (20) 	Q.3. D)	(a) Do as directed: (Each of 02 marks)	(04)
 2. What is the effect of temperature on reaction rates? (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) Q.4. A) Answer the following questions. (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants? (c) Define Monomer and micellisation (b) Write a note on classification of surfactants (c) Define Monogeneous reaction. (c) Define homogeneous reaction. (c) Define micelle. (c) D		1 Discuss half life period	(04)
 (b) Enlist various methods for measuring surface tension. Discuss anyone in detail. (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants (c) Discuss the following questions (Any two) (a) Do as directed: (Each of 01 marks) (b) Micelle (Each of 01 marks) (c) Define micelle. (c) Discuss of a dispersion of micelles in a solvent is known as 		2. What is the effect of temperature on reaction rates?	
 (c) Discuss the factors affecting the critical micelle concentration and miceller size. (04) (a) Do as directed: (Each of 02 marks) (a) Do as directed: (Each of 02 marks) (b) Write a note on classification of surfactants? (c) Define Monomer and micellisation (b) Write a note on classification of surfactants (c) Define homogeneous reaction. (c) Define micelle. <li< td=""><td></td><td>(b) Enlist various methods for measuring surface tension. Discuss anyone</td><td>in detail. (04)</td></li<>		(b) Enlist various methods for measuring surface tension. Discuss anyone	in detail. (04)
 Q.4. A) Answer the following questions. (a) Do as directed: (Each of 02 marks) (b) Wrich are the applications of surfactants? (c) Define Monomer and micellisation (b) Write a note on classification of surfactants (c) Write a note on classification of micelles in a solvent is known as (c) Write a note on classification of write and write a note on classification of the provide and the provide and		(c) Discuss the factors affecting the critical micelle concentration and mice	eller size. (04)
 (a) Do as directed: (Each of 02 marks) (b) Wrich are the applications of surfactants? (c) Define Monomer and micellisation (c) Write a note on classification of surfactants (c) Wite a note on classification of surfactants (c) Wite a note on classification of surfactants (c) Wite a note on classification of micelles in a solvent is known as (c) Wite a note on classification of micellization 	0.4. A)	Answer the following questions.	
 Which are the applications of surfactants? Define Monomer and micellisation (b) Write a note on classification of surfactants (04) Q.4. B) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (03) Define homogeneous reaction. Define micelle. A solution consists of a dispersion of micelles in a solvent is known as a) Micelle b) Micellization c) Miceller solution c) Miceller solution 	C , , ,	(a) Do as directed: (Each of 02 marks)	(04)
 2. Define Monomer and micellisation (b) Write a note on classification of surfactants (04) Q.4. B) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (b) Micelle (c) Define homogeneous reaction. 2. Define micelle. 3. A solution consists of a dispersion of micelles in a solvent is known as a) Micelle b) Micellization c) Miceller solution d) none 		1. Which are the applications of surfactants?	
 (b) Write a note on classification of surfactants (04) (a) Do as directed: (Each of 01 marks) (a) Define homogeneous reaction. (03) (04) (04) (05) (05) (06) (07) (08) (09) (09) (09) (01) (02) (03) <l< td=""><td></td><td>2. Define Monomer and micellisation</td><td></td></l<>		2. Define Monomer and micellisation	
 Q.4. B) Answer the following questions (Any two) (a) Do as directed: (Each of 01 marks) (03) 1. Define homogeneous reaction. 2. Define micelle. 3. A solution consists of a dispersion of micelles in a solvent is known as a) Micelle b) Micellization c) Miceller solution d) none 		(b) Write a note on classification of surfactants	(04)
 (a) Do as directed: (Each of 01 marks) (03) 1. Define homogeneous reaction. 2. Define micelle. 3. A solution consists of a dispersion of micelles in a solvent is known as 	Q.4. B)	Answer the following questions (Any two)	
 Define homogeneous reaction. Define micelle. A solution consists of a dispersion of micelles in a solvent is known as <u>a) Micelle</u> <u>b) Micellization</u> <u>b) Micellization</u> 		(a) Do as directed: (Each of 01 marks)	(03)
 2. Define micelle. 3. A solution consists of a dispersion of micelles in a solvent is known as a) Micelle b) Micellization c) Miceller solution d) none 		1. Define homogeneous reaction.	
 3. A solution consists of a dispersion of micelles in a solvent is known as a) Micelle b) Micellization c) Micellar solution d) none 		2. Define micelle.	
a) Micelle b) Micellization		3. A solution consists of a dispersion of micelles in a solvent is known	n as
a) Miceller solution d) none		a) Micelle b) Micellization	
() Mitchial Solution $()$ Nonc		c) Micellar solution d) none	
(b) Write a note on critical micelle concentration. (03)		(b) Write a note on critical micelle concentration.	(03)
(c) Define catalysis. Discuss about various types of catalysis. (03)		(c) Define catalysis. Discuss about various types of catalysis.	(03)