[Th	is qu	estion paper con	tains 2 printe	d pages.]			
Sr.	No. o	of Question Paper	: 6959	D	Your Roll No		
Uni	que	Paper Code	: 217583				
Nar	ne o	f the Course	: B.Sc. (App	o. Sci./Anal. Chem	./Ind. Chem.)		
Name of the Paper			: Polymer S	cience – EL-310	(ii)		
Semester			: V				
Duration: 3 Hours					Maximum Marks	: 50	
Ins	truc	tions for Candid	ates				
1.	Write your Roll No. on the top immediately on receipt of this question paper.						
2.	Attempt five questions in all.						
3.	Que	estion No. 1 is co	mpulsory.				
1.	Do	all					
	(a)	What are the fac	tors affects c	rystalline melting	point of polymers?	(3)	
	(b)	Define polymers	. Distinguish	between a polymo	er and a macromolecule	e. (3)	
	(c)	What are living 1	polymers?			(3)	
	(d)	Write a note on	tacticity of po	olymers.		(3)	
	(e)	Write a short no	te on Free Vo	olume Theory.		(2)	
2.	(a)	What do meant b	y functional	polymers & give	their applications?	(3)	
	(b)	How will you syn (PVC) from acet		yrene (PS) from be	enzene and polyvinyl chl	oride (3)	
	(c)	Explain the role	of inhibitor ir	n polymer chemist	ry.	(3)	
3.	Wri	te short note on tl	ne followings	:			
	(a)	Factors affecting	To of nolvm	ers		(3)	

	(b)	Conducting polymers and their importance in daily life	(3)
	(c)	Lower and upper critical solution temperature	(3)
4.	(a)	What do you meant by silicon rubber? Give its applications daily life.	in (4)
	(b)	Discuss the mechanism for the polymerisation of ethylene in the presence organic peroxide as catalyst.	e of (5)
5.	(a)	Discuss the light scattering method for the determination of molar masse polymers.	es of (3)
	(b)	Write notes on plasticizer & give suitable examples.	(3)
	(c)	Write the synthesis of novalac & give its industrial applications.	(3)
6.	(a)	What are the criteria for solubility of any polymer?	(3)
	(b)	How will you classified polymer on the basis of structure?	(3)
	(c)	Write a note on texture of polymers.	(3)
7.	Exp	plain the followings terms:	
	(a)	Acrylic polymers	(3)
	(b)	Solubility parameters	(3)
	(c)	Polydispersity index (PDI)	(3)