1005E482   Candidate's Seat No :

M.Sc. (Sem.-II) Examination
410
CHEP : Inorganic and Organometalic Polymers

Time : 3 Hours]   May-2017   [Max. Marks : 70]

Q-1-a	Provide Classification of Inorganic Polymers according to different molecule present in chain with examples.	7
	Or	
Q-1-a	Describe Chemical Structure, Synthesis and Uses of Boron Nitride and Boron Carbide.	7
Q-1-b	Explain Manufacturing process of Glass-Silicates. Give examples of different types of Glass.	7
	Or	
Q-1-b	What is the constitution of Portland Cement? Provide manufacturing process of Portland Cement.	7
Q-2-a	How Organic Polymers are differing from Inorganic Polymers? Which Is superior?	7
	Or	
Q-2-a	Discuss the Structure, Properties and Applications of Sand and Clay.	7
Q-2-b	What are Isopoly and Heteropoly acids and their salts? Give their uses.	7
	Or	
Q-2-b	Describe Synthesis, Important Properties and Applications of Allotropes of Carbon.	7
Q-3-a	Explain any five Surface reactions of Polyphosphazenes.	7
	Or	
Q-3-a	Explain Ring Opening Polymerization of Polyphosphazenes. Give note on Phosphazenes Elastomers.	7
Q-3-b	What is Phthalocyanine Polymer? Give its uses.	7
	Or	
Q-3-b	Classified Polyphosphazenes according to Geometric skeleton. Give uses of Polyphosphazenes in Medical and Electroluminescent Industries.	7
Q-4-a	"Siloxanes are good elastomers than organic rubbers" Justified this sentence.	7
	Or	
Q-4-a	Describe Synthesis of Polysilanes by Anionic Initiators. Give its Applications.	7
Q-4-b	Describe nomenclature of Polysilaxones. Why Polysilaxones are more thermally stable than Organic polymer?	7
	Or	
Q-4-b	Explain Ring-Opening Polymerization of Cyclosiloxanes by Ionic Initiators.	7
Q-5	Answer the following questions in short.	14
	1. Why Diamondcan be used as Abrasive?	
	2. Give example of Fluoropolymers with its uses.	
	3. What is Thiokol polymer? Give its uses.	
	4. Why Polyphosphazenes can be used as Flame retarding material?	
	5. Enlist any four Organometallic Polymers.	
	6. What is drawback of Asbestos?	
	7. Enlist at least four Phosphorous containing Polymers and its uses.	