



SHREE H. N. SHUKLA GROUP OF COLLEGES

(AFFILIATED TO SAURASHTRA UNIVERSITY & GTU)

2-Vaishali nagar,
Near amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2440478, 2472590

3-Vaishali nagar, Near
amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2224362

Behind marketing yard,
Near Lalpari lake, Between
Amargadh-Bhichri,
Rajkot- 360 002.
Ph.No. 90990 63150

M.Sc. Chemistry Internal/prelims exam

Semester II C-203 Polymer chemistry

Time: 1 hour

Date: --/--/----

Total marks: 30

Q-1 Give the answer of following questions (each question have 1 marks)

05 marks

1. Define: live polymer, polycondensation polymerization
2. What is copolymer? Explain co polymerization?
3. Explain co-ordination polymerization.
4. Explain stereo regular polymer.
5. Explain ring scission polymerization with example of polyurethane.

Q-2 Give the answer of any five out of following questions (each questions has 2 marks)

10 marks

1. Explain Flory and Mayo chain termination.
2. Explain the kinetics of cationic chain polymerization Explain co-ordination polymerization.
3. Explain the various reactivity ratio and resultant polymer in case of copolymerization carried out between two monomers.
4. Explain the emulsion polymerization method for the polymer synthesis.
5. Derived equation of kinetics of poly condensation polymerization reaction (carother equation)
6. Explain stepwise polymerization with the example of polystyrene.
7. Explain thermodynamics of ring transformation to linear polymer (ring scission polymerization) .
8. Explain fractionation precipitation method.
9. Explain thermal degradation of polymer obtained through the rapture of main chain.
10. Explain cross linking reaction/ vulcanization of rubber.



SHREE H. N. SHUKLA GROUP OF COLLEGES

(AFFILIATED TO SAURASHTRA UNIVERSITY & GTU)

2-Vaishali nagar,
Near amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2440478, 2472590

3-Vaishali nagar, Near
amrapali railway crossing,
Raiya road, Rajkot- 360 001.
Ph.No.-(0281) 2224362

Behind marketing yard,
Near Lalpari lake, Between
Amargadh-Bhichri,
Rajkot- 360 002.
Ph.No. 90990 63150

Q-3 Give the answer of following questions (each questions has 5 marks)

15 marks

1. Explain stepwise polymerization with suitable example.
2. Explain kinetics of polycondensation polymerization and its effect over polymer.
3. Explain physic chemical properties of polymer.



***** All the best *****