



SCAN ME

Join 'VIT Question Papers' Today By Scanning The QR Or By Simply Searching It On Telegram App.

**VIT**Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)**Continuous Assessment Test – I**

Programme Name & Branch: B.Tech Chemical Engineering

Course Name & Code:

Polymer Technology & CHE1019

Class Number: VL2019205003894 Slot: D2+TD2 Exam Duration: 1.5 hrs Maximum Marks: 50

General instruction(s): Answer all the questions

S.No.	Question	marks)
1.	Classify and explain the different types of polymers based on the molecular forces of attraction.	10
2.	Write short notes on (a) Solution polymerization (b) Bulk polymerization	10
3.	Mention the advantages and disadvantages of suspension polymerization with respect to other polymerization process.	10
4.	What is initiator? How initiator is formed? Explain the decomposition behaviour of initiators?	10
5	Calculate the number-average molecular weight of a random nitrile rubber [poly(acrylonitrile-butadiene) copolymer]. Data given: 1. Fraction of butadiene repeat units, $f_{Bu} = 0.30$ (\Rightarrow fraction of acrylonitrile repeat units, $f_{Ac} = 0.70$) 2. Degree of polymerization = 2000 Assumption: Given data is accurate; the material is pure.	10