

- Q.25 Describe application of polymers.
- Q.26 What is monomer explain the any three monomers.
- Q.27 Give five example of commodity plastics.
- Q.28 Write different steps in chain Polymerization.
- Q.29 What is the role of additives in polymer processing?
- Q.30 Write monomer for polyester and polystyrene.
- Q.31 Write polymerization of bakelite.
- Q.32 Write the raw materials, reactions and condition in nylon manufacturing.
- Q.33 What is weighted Average molecular weight.
- Q.34 What are the use of urea formaldehyde.
- Q.35 What is bulk polymerization.

#### SECTION-D

**Note:** Long Answer type question. Attempt any two questions. (2x10=20)

- Q.36 Explain different types of polymerizations with suitable example.
- Q.37 Describe any two polymer processing techniques with example.
- Q.38 Describe the condensation and addition polymerization with help of suitable example.

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#### 4th Sem / Chemical Engineering Subject : Polymer Technology

**Time : 3 Hrs.**

**M.M. : 100**

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 Condensation polymerization of \_\_\_\_\_ produces bakelite.
- Phenol & formaldehyde
  - Phenol and acetaldehyde
  - Propylene
  - None
- Q.2 \_\_\_\_\_ scrap can be recycled and reutilised
- Bakelite
  - Epoxy resin
  - Polythene
  - None
- Q.3 Which of the following is a natural polyamide fibre.
- Wool
  - Silk
  - Cotton
  - None
- Q.4 Most commonly used rubber vulcanization agent is

- a) Sulphur                      b) Bromide  
c) Platinum                    d) None
- Q.5 Polystyrene is a plastic at room temperature.  
a) Ductile                      b) Brittle  
c) Malleable                   d) None
- Q.6 \_\_\_\_\_ is a thermosetting plastic.  
a) PVC                          b) Polythene  
c) Bakelite                    d) None
- Q.7 \_\_\_\_\_ is an addition polymer  
a) Nylon                        b) Bakelite  
c) Polythene                   d) None
- Q.8 \_\_\_\_\_ is a natural fibre  
a) Cellulose                    b) Dacron  
c) Nylon-6                     d) None
- Q.9 Bakelite is a/an.  
a) Addition polymer        b) Elastomer  
c) Thermosetting            d) None
- Q.10 Buna-S is also called  
a) Polyurethane              b) SBR  
c) Teflon                        d) Bakelite

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## SECTION-B

**Note :** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define monomer.  
Q.12 Define step polymerization.  
Q.13 Write one natural fibers.  
Q.14 Give examples of one free radical.  
Q.15 Write example of thermosetting polymer.  
Q.16 Write monomer of polyester.  
Q.17 Write example of bulk polymerization.  
Q.18 Write structure of polythene.  
Q.19 Write example of suspension polymerization.  
Q.20 Write units of Viscosity.

## SECTION-C

**Note :** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Explain solution polymerization and its disadvantage.  
Q.22 Explain calendaring.  
Q.23 What is degree of polymerization.  
Q.24 Draw schematic representation of Block co-polymer.

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