

Roll No. ....

**Y – 3212**  
**M.Sc. (Second Semester)**  
**EXAMINATION, May/June 2021**  
**INDUSTRIAL CHEMISTRY**  
**Paper–204(A)**  
**(Polymer Science-I)**  
*Time : Three Hours*

*Maximum Marks : 85*

*Minimum Pass Marks : 29*

**Note :** Attempt *all* questions.

**Unit-I**

1. Explain in detail condensation polymerization. 17

**Unit-II**

2. Describe cross linking reactions of polymer with examples. 17

**Unit-III**

3. Describe glass transition temperature. Write down the mechanism and factors influencing its temperature. 17

**Unit-IV**

4. Write notes on any two of the following : 17
- (a) TPE
  - (b) Thermal and photo degradation
  - (c) Rubber products with examples.

**Unit-V**

5. Write down the synthesis and uses of any three of the following : 17
- (a) PVC
  - (b) Polyethylene
  - (c) Polyamides
  - (d) Polystyrene
  - (e) Cellulose plastics.