xv) Discuss thermoplastic resins used for making adhesives in brief.

## **SECTION-C**

**Note:**Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Explain raw materials used, manufacturing process and applications of epoxy coatings.
- Q.4 Describe the preparation, advantages & disadvantages of polyurethanes in detail.
- Q.5 Discuss the general steps involved in the application of adhesive on a surface for high adhesive strength in detail.
- Q.6 How will you classify coatings? Explain different types of coatings in detail.
- Q.7 Write short note on the following:
  - a) Hot melt adhesives
  - b) Adhesives for plastics

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## 6<sup>th</sup> Sem. / Plastic Technology Subject : Adhesive and Coating Technology

Time: 3 Hrs. M.M.: 100

## **SECTION-A**

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1 a) Write two resins used for making adhesives.
  - b) Define glue line.
  - c) Name the major factors used to determine whether curing & drying of adhesive film has taken place or not?
  - d) Write full form of UF and MF resins.
  - e) What are the main constituents of varnishes?
  - f) Write any two natural adhesives.
  - g) Name two common defects in coatings.
  - n) What are solvent based coatings?

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- i) Name the adhesives used for pressure sensitive applications.
- j) What is adhesive action?
- k) Write applications of phenol formaldehyde resin based adhesives.
- Name the coatings which can be applied on dry as well as damp surfaces.
- m) What are elastomeric coatings?
- n) Write two advantages of adhesives.
- o) What is mechanical adhesion?
- Write two factors influencing the thickness of coating.
- q) Name two methods of applying adhesives.
- r) Write two adhesives for metals.

## **SECTION-B**

**Note:**Short answer type questions. Attempt any ten parts 10x4=40

Q.2 i) Discuss the classification of adhesives in brief.

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- ii) What is importance of surface preparation before adhesive application?
- iii) Write advantages of polyethylene adhesives?
- iv) What are the applications of melamine formaldehyde resin?
- v) Describe adhesives for wood in brief.
- vi) What is difference between water based coatings and solvent based coatings?
- vii) Explain the water resistance test of an adhesive in brief.
- viii) What is pre-curing? Why it is done?
- ix) Explain preparation of urea formaldehyde resin.
- x) Discuss any two additives used in coatings.
- xi) Explain the applications of water soluble coatings?
- xii) Discuss the properties of varnishes brief.
- xiii) Explain peel off defect of coatings in brief.
- xiv) Write properties of epoxies.

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