

**M.Sc. III Semester Degree Examination, April/May - 2024****INDUSTRIAL CHEMISTRY****DSE - 2A : Industrial Materials****(NEP)**

Time : 3 Hours

Maximum Marks : 70

Note : (i) Answer **any five** questions including **Q.No 1**.(ii) **Q.No 1** is **Compulsory**.

1. (a) Describe the method of synthesis of an Azo dye. **3+4+4+3=14**
(b) Write a note on classification of drugs.
(c) What are CNS stimulants? Give the structure of amphetamine.
(d) How detergents are classified? Give example for each class.
2. (a) Explain the manufacture of Styrene rubber and its application. **5+5+4=14**
(b) Discuss the vegetable tanning process of leather.
(c) Write briefly on classifications of hides and skins.
3. (a) Write a note on fire retardant chemicals. **5+5+4=14**
(b) How ammonia is manufactured?
(c) Discuss the manufacture of phosphoric acid.
4. (a) Explain the methods of curing of paints. **5+5+4=14**
(b) Give the classifications of paints.
(c) Discuss the methods of manufacturing of paints.
5. (a) Write a note on theories of adhesion. **5+5+4=14**
(b) Write a note on natural product based adhesives.
(c) Give the preparation of:
(i) TNT
(ii) Dynamite



- 6.** (a) Give the synthesis of Buna-N rubber. Mention its applications. **5+5+4=14**
(b) How Urea is synthesized? Discuss.
(c) Write a note on Nitrogen industries.
- 7.** (a) Write a note on properties of paints. **5+5+4=14**
(b) Give the synthesis of ammonium phosphates.
(c) Give the synthesis of ammonium nitrate.
- 8.** (a) Give the structure and synthesis of poly isoprene rubber. **5+5+4=14**
(b) How baking powder is synthesized? Discuss.
(c) Give the characteristics of explosives.

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