

Sl. No.

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21ICH3E2L

M.Sc. III Semester Degree Examination, April/May - 2023

INDUSTRIAL CHEMISTRY

**Paper No. : DSE-2 A : Industrial Materials
(CBCS)**

Time : 3 Hours

Maximum Marks : 70

Note : Answer *any five* questions including **Q.No. 1** is **compulsory**.

1. (a) How dyes are classified ? Mention the structure of azo and anthoquinone dyes. **4+3+3+4=14**
(b) Discuss the methods of application of dyes of fibres.
(c) Describe the synthesis and applications of chloramines-T.
(d) With neat flow chat explain the manufacture of shampoo.

2. (a) Explain the manufacture of natural rubber. How vulcanization is carried out ? **5+5+4=14**
(b) Discuss the 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 urea is manufactured ?
(c) Discuss the manufacture of superphosphate.

4. (a) What are the requirements of the good paints ? **5+5+4=14**
(b) Give the classifications of paints.
(c) Discuss the methods of manufacturing of paints.

5. (a) List the advantages and disadvantages of adhesives. **5+5+4=14**
(b) Write a note on :
(i) Pressure sensitive adhesives
(ii) Hot melt adhesives
(c) Give the preparation of :
(i) Nitrocellulose
(ii) RDX

P.T.O.

- 6.** (a) Give the synthesis of Buna-S rubber. Mention its applications. **5+5+4=14**
(b) How ammonia is synthesized ?
(c) Write a note on potassium industries.
- 7.** (a) Write a note on properties of paints. **5+5+4=14**
(b) Give the synthesis of cyanamide.
(c) Give the synthesis of ammonium nitrate.
- 8.** (a) Give the structure and synthesis of Thiokol rubber. **5+5+4=14**
(b) How baking powder is synthesized ? Discuss.
(c) Give the classification of explosives.

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