

2 APR 2019

Seat No. _____

B.Sc. Sem. – III (Industrial Chemistry) Examination

Paper – ICHCC – 304: Fine and Heavy Chemicals - I
Paper Code: 20684

Time: **2.30** Hours

Maximum Marks: **70**

- Que.1 Write short note on any two of following. [14]
1. Acid-base catalysis
 2. Positive catalysis
 3. Promoters
 4. Characteristics of catalysis
- Que.2 Write short note on any two of following. [14]
1. Ni-H
 2. V_2O_5
 3. TiO_2
 4. Pd
- Que.3 Give industrial production of any one with flow sheet diagram and also explain its applications in various chemical industries. [14]
1. H_2SO_4
 2. NH_3
- Que.4 Give industrial production of any one with flow sheet diagram and also explain its applications in various chemical industries. [14]
1. Bromine
 2. Iodine
- Que.5 Write short note on any two of following. [14]
1. Anionic detergent
 2. Cationic detergent
 3. Toilet soap
 4. Metal soap