

10 APR 2019

Seat No. \_\_\_\_\_

**Examination March / April – 2019**  
**B.Sc. Sem. – VI**  
**Industrial Chemistry, Paper- ICHCC-601, Subject Code: 21868**  
**Subject Title – Fundamental of chemical engineering**

**Time: 2.30 Hours**

**Maximum Marks: 70**

- Que.1 (A) What is size reduction? Discuss methods of size reduction in detail. [10]  
(B) State and explain uses of rotary knife cutter. [04]  
OR
- Que.1 (A) Classify size reduction equipment with example. [10]  
(B) State and explain uses of ball mill. [04]
- Que.2 (A) What is fluid? Discuss classification of fluid with example. [10]  
(B) State and explain steady and unsteady flow. [04]  
OR
- Que.2 (A) Discuss orifice meter with neat sketch. [10]  
(B) State and explain uniform and non-uniform flow. [04]
- Que.3 (A) Define centrifugal pump. Discuss its construction, working and principle. [10]  
(B) State and explain uses of gate valve. [04]  
OR
- Que.3 (A) Discuss its construction, working and principle of propeller fan. [10]  
(B) State and explain uses of globe valve. [04]
- Que.4 (A) Discuss its construction, working and application of 1-1 type heat exchanger. [10]  
(B) Define heat exchanger with example. [04]  
OR
- Que.4 (A) Discuss its construction, working and application of 1-2 type heat exchanger. [10]  
(B) State and explain Fourier's law. [04]
- Que.5 (A) Define leaching and give example of leaching. [10]  
(B) Give mechanism of leaching and extraction. [04]  
OR
- Que.5 (A) Draw schematic sketch of Bollman extractor and explain its working. [10]  
(B) State and explain uses of Hildebrandt extractor. [04]