

Semester-VI, B.Sc. (Industrial Chemistry) Examination
October / November -2015
Paper- IC-601: Fundamental Chemical Engineering - II
Paper Code: 4649

Time: 2.30 Hours

Total Marks: 70

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|-------|---|----|
| Que.1 | (A) Explain types of fluid with example. | 10 |
| | (B) Explain Reynold Number with example. | 04 |
| | OR | |
| Que.1 | (A) State law of conservation of mass and explain Continuity equation. | 10 |
| | (B) Write about vaccume pumps. | 04 |
| Que.2 | (A) Draw schematic sketch of Boll man extractor & explain its working. | 10 |
| | (B) Give application of Centrifuge pump. | 04 |
| | OR | |
| Que.2 | (A) Explain mass transfer phenomena during leaching | 10 |
| | (B) What is mass transfer? State the formula to explain rate of mass transfer for leaching. | 04 |
| Que.3 | (A) Describe single acting – single cylinder Reciprocating Pump's principle, construction and working system. | 10 |
| | (B) Classify Reciprocating pump. | 04 |
| | OR | |
| Que.3 | (A) Write a short note on Toothed – roll Crusher with sketch. | 10 |
| | (B) Draw only figure of Vane Axial Fan. | 04 |
| Que.4 | (A) Write a short note on Tube axial fan with sketch. | 10 |
| | (B) Discuss mechanism of size reduction. | 04 |
| | OR | |
| Que.4 | (A) Write a note on Steam Jet Ejector. | 10 |
| | (B) Draw only figure of Gyratory Crusher. | 04 |
| Que.5 | (A) Write a note on Finned Tube Heat Exchanger. | 10 |
| | (B) State the component of Fan. | 04 |
| | OR | |
| Que.5 | (A) What is heat transfer? Explain Fourier's law of conduction? | 10 |
| | (B) What is LMTD? Explain it. | 04 |