

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-V Examination-Nov/Dec.-2011

Subject code: 150502

Date: 24/11/2011

Subject Name: Mechanical Operation

Time: 2.30 pm -5.00 pm

Total marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

Q.1 (a) Give brief account of fluidization. **07**
(b) Discuss plate and frame filter press. **07**

Q.2 (a) Give and discuss classification of size reduction equipments. **07**
(b) Discuss mixing of solids. **07**

OR

(b) Giving purpose of agitation give names of various agitators. **07**

Q.3 (a) Name various laws for crushing and discuss and derive any one. **07**
(b) Discuss the process of sedimentation. **07**

OR

Q.3 (a) Write note on attrition mill, giving outline-sketch **07**
(b) Discuss briefly decantation and decanters. **07**

Q.4 (a) Give a brief account of ultra fine grinders. **07**
(b) Discuss ultra filtration. **07**

OR

Q.4 (a) Discuss capacity and effectiveness of screens. **07**
(b) Write a brief note on cyclones. **07**

Q.5 (a) Write a brief note on importance of Mechanical Operations in Chemical Industry **07**
(b) Discuss open circuit and closed circuit operations. **07**

OR

Q.5 (a) Give a brief account of thickeners. **07**
(b) Discuss the process of sedimentation. **07**
