

V. P. & R. P. T. P Science College,
B.Sc. Industrial Chemistry (5th Semester) Internal Test
MECHANICAL OPERATIONS

Date: 07/10/2017

Time: 11:00 a.m. to 12: 30 p.m.

Subject code:US05CICH05

Total Marks: 25

Q.1 Select the correct option

03

- I. A granular material used to increase the porosity of the cake is____
a. Filter media b. Filter aid c. Nylon cloths d. none of these
- II. Sodium ethyl xanthate is a____
a. Promotor b. Frothing agent c. Collector d. Surfactant
- III. The crusher in which movable jaw is pivoted at the top is____
a. Dodge jaw crusher b. Blake jaw crusher
c. Roll crusher d. Gyratory crusher

Q.2 Answer the following in short (ANY TWO)

04

- I. List different filter media.
- II. Explain: Terminal settling velocity and Hindered settling.
- III. Write (1) Rittinger's law (2) kick's law



Q.3 Write a note on Plate and Frame filters.

06

OR

Q.3 Write a note on Rotary drum filter.

06

Q.4 Write a note on Hydraulic Jig.

06

OR

Q.4 Write a note on Laboratory batch sedimentation test.

06

Q.5 Derive an equation for speed of ball mill.

06

OR

Q.5 With the help of diagram explain working of vibrating screens.

06