

V. P. & R. P. T. P. Science College
Internal Exam
B.Sc. (Fifth Semester)
Wednesday, 05th October- 2016
Subject code: US05CICH05 (Mechanical Operations)
Industrial Chemistry

Time: 11:00 am to 12:30 pm

Total Marks: 25

- Q-1 **Answer the following MCQ'S:** (03)
- In early stage of filtration, the rate of filtration is _____
(a) High (b) Low
(c) Medium (d) Constant
 - The settling rate of a particle depends upon its
(a) Size (c) Density
(b) Concentration of solids (d) All of the above
 - Paddle impeller is _____ impeller.
(a) Axial flow (c) Radial flow
(b) Centrifugal (d) Both a & c
- Q-2 **Answer any two of the following:** (04)
- Explain constant rate filtration and constant pressure filtration.
 - Explain Terminal settling velocity and Hindered settling.
 - Sketch the type of impellers
- Q-3 Write construction and working of rotary drum filters. (06)
- OR**
- Q-3 Write note on filter medium & its characteristics. (06)
- Q-4 Write short note on Hydraulic jig. (06)
- OR**
- Q-4 Write short note on laboratory batch sedimentation process. (06)
- Q-5 Explain prevention of swirling and vortex formation. (06)
- OR**
- Q-5 Write detail note on Impellers used mixing process. (06)

