



V.P. & R.P.T.P. SCIENCE COLLEGE
B.Sc. (Second Semester)
Internal Exam
Wednesday 15th March, 2017
Subject code: US02CICV02 (Mechanical Operations)
Industrial Chemistry Vocational

Time: 01:30 pm to 02:30 pm

Total Marks: 25

Q-1 Answer the following multiple choice questions: [03]

- I. The separation of solids from a suspension with the help of porous media is known as _____
 - a. Smelting
 - b. Sedimentation
 - c. Mixing
 - d. Filtration
- II. In sedimentation, solids gets settled down because of _____
 - a. Gravitational force
 - b. Buoyant Force
 - c. Charge attraction
 - d. Both (a) and (b)
- III. Practical aims of mixing is to _____
 - a. To promote a chemical reaction
 - b. To carry out physical change
 - c. To produce physical mixtures
 - d. All of the above

Q-2 Answer the following short questions (Any Two) [04]

- I. Define: Cake Filtration.
- II. Differentiate between sedimentation and filtration processes.
- III. Draw the labeled diagram of liquid-liquid mixing process.

Q-3 With neat diagram explains construction and working of Plate and Frame filter press. [06]

OR

Q-3 Define filters aid? Explain methods used to add filter aid. [06]

Q-4 Write a note on Jig. [06]

OR

Q-4 Explain in detail laboratory batch sedimentation process. [06]

Q-5 Explain in detail types of impeller. [06]

OR

Q- 5 How to prevent swirling and vortex? Explain in detail. [06]