

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

Date: 09/10/2017

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

Subject code:US05CICV06

Total Marks: 25

Q.1 Select the correct option **03**

- I. Separation by distillation is not possible when relative volatility is ___ one.
a. Greater than b. Less then c. Equal d. None of these
- II. What is the tower diameter to packing size ratio for minimizing the channeling?
a. >8 b. <8 c. =8 d. None of these
- III. Magma is the mixture of mother liquor and _____.
a. Crude b. Crystals c. Slurry d. None of these

Q.2 Answer the following in short (ANY TWO) **04**

- I. Limitation of McCabe method.
II. Define the following terms with reference to extraction
I. Raffinate II. Extract
III. Explain the mechanism of crystallization.



Q.3 Write note on Azeotropic distillation. **06**

OR

Q.3 Write in brief on Flash distillation & draw its sketch. **06**

Q.4 Give the construction and working of continuous operated mixer-settler with neat sketch. **06**

OR

Q.4 Draw the neat sketch of packed column used for gas absorption and write its construction and functioning. **06**

Q.5 Explain the construction and working of Agitated crystallizer with suitable diagram. **06**

OR

Q.5 Explain the construction and working of Swenson-walker crystallizer with suitable diagram. **06**