

Examination December – 2020

M.Sc. Semester – III

Industrial Chemistry: Paper – IC – 11, Code: 3568

Subject Title: Unit operations & Unit processes – II

Time: 1.30 hr]

09 DEC 2020

[Total Marks: 42

Que.1 (A) What is drying? Discuss construction and working of spray dryer with neat. Sketch. [14]

OR

Que.1 (A-I) Explain two types of filtration method in detail. [07]

(A-II) How does tray dryer work? Explain it with neat sketch. [07]

Que.2 (A) What is distillation? Discuss fractional distillation system with figure. [14]

OR

Que.2 (A-I) How distillation and extraction differentiate from each other? (Give at least 7 points) [07]

(A-II) Write a short note on bubble cap tray with figure. [07]

Que.3 (A) What is oxidation? How Acetic acid is industrially produced by oxidation unit process? [14]

OR

Que.3 (A-I) Elaborate mechanism of Nitration unit process with example. [07]

(A-II) What is mechanical separation? Discuss trommel separator with figure. [07]

Que.4 (A) What is reduction? How Xylidine is industrially produced? [14]

OR

Que.4 (A-I) Illustrate the mechanism of esterification with example. [07]

(A-II) Explain bag filter in detail. [07]

નોંધ:

- પ્રશ્નપત્રનો સમય ૧.૩૦ કલાકનો રહેશે.
- પ્રશ્નપત્રમાં ૪ પ્રશ્નોમાંથી કોઈ પણ ત્રણ પ્રશ્નોના જવાબ આપવાનો રહેશે.
- દરેક પ્રશ્નના ગુણ એકસરખા (૧૪ માર્કના) રહેશે. પ્રશ્નપત્ર કુલ ૪૨ માર્ક્સ નું રહેશે.