

# C.U.SHAH UNIVERSITY

## Summer Examination-2019

**Subject Name: Industrial chemistry-I**

**Subject Code: 4SC04IDC1**

**Branch: B.Sc. (chemistry)**

**Semester: 4**

**Date: 24/04/2019**

**Time: 02:30 To 05:30**

**Marks: 70**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

**Q-1 Attempt the following questions: (14)**

- a) Write the definition of ceramics. (1)
- b) Which metal oxides are used for manufacturing of pink and blue color glass? (1)
- c) Write Greek name of ceramics. (1)
- d) Define: cullet. (1)
- e) Draw the structure of DDT. (1)
- f) Define fumigents. (1)
- g) Write full form of NPK fertilizer. (1)
- h) What is batch material? (1)
- i) Define glass. (1)
- j) What is fertilizer? (1)
- k) What happened to the plant due to deficiency of nitrogen? (1)
- l) Draw the structure of chlorobenzene. (1)
- m) Which pH range is required for the soil fertility? (1)
- n) What are different types of decoration? (1)

**Attempt any four questions from Q-2 to Q-8**

**Q-2 Attempt all questions (14)**

- a) Discuss chemical properties of glass. (7)
- b) Explain any three steps for manufacturing of ceramics. (7)

**Q-3 Attempt all questions (14)**

- a) Write synthesis and uses of Methoxichlor and aldrine. (7)
- b) Write synthesis and uses of HCH and Malathion. (7)

**Q-4 Attempt all questions (14)**

- a) Explain production of ammonium nitrate fertilizer. (7)
- b) Discuss the deficiency of micro nutrients in plant. (7)

**Q-5 Attempt all questions (14)**

- a) Write a note on raw material of glasses. (7)



- b) Write a note on safety glass (7)
- Q-6 Attempt all questions (14)**
- a) Write synthesis and uses of DNP and parathion. (7)
- b) Write brief note on insecticides. (7)
- Q-7 Attempt all questions (14)**
- a) Explain the production method for urea fertilizer. (6)
- b) Write essential requirements for fertilizer. (5)
- c) Write the definition of primary, secondary, and tertiary plant nutrients. (3)
- Q-8 Attempt all questions (14)**
- a) Explain chemical reactions for glass manufacturing process. (6)
- b) Discuss jollyng process in detail. (5)
- c) Describe any three raw materials of glass. (3)

