

Enrollment No: \_\_\_\_\_ Exam Seat No: \_\_\_\_\_

# C.U.SHAH UNIVERSITY

## Summer Examination-2017

Subject Name : Chemistry-VII

Subject Code : 4SC04CHC1

Branch: B.Sc. (Chemistry)

Semester : 4

Date : 15/04/2017

Time : 10:30 To 01:30

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)**
- Which reagent is used for oxidation of allylic or benzylic C-H fragments to the corresponding allylic or benzylic alcohols? (1)
  - Draw the reaction sequence of Stephen synthesis. (1)
  - Draw the structure of intermediate formed by oxidation of alkene with ozone. (1)
  - Which reagent is used for synthesis of glucaric acid from glucose? (1)
  - Give modern definition of terpenoids. (1)
  - What is the structure of isoprene? (1)
  - Give example of bicyclic monoterpene. (1)
  - Which chemical reaction is used for lengthening of carbon chain in aldose? (1)
  - What are different classes of amino acids based on their nutritional requirement? (1)
  - What is zwitterionic nature of amino acids? (1)
  - Draw the structure of Pregvanil. (1)
  - What are different classes of dyes based on their method of application? (1)
  - What are different classes of terpenoids? (1)
  - Draw the structure of methyl orange. (1)

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

- Q-2 Attempt all questions (14)**
- Explain MPV reduction and Skraup synthesis with mechanism. (7)
  - Explain the applications of  $\text{LiAlH}_4$  in organic synthesis. (7)
- Q-3 Attempt all questions (14)**
- Write a note on (7)
    - Ullmann reaction,
    - Silanes and
    - $\text{KMnO}_4$ .
  - Explain the chemical reactions for determining constitution of menthol. Write the synthesis of menthol from myrcene. (7)



