

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Advanced Chemistry

Subject Code: 5SC03ADC1

Branch: M.Sc.(Chemistry)

Semester: 3

Date: 28/03/2018

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator and 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.
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SECTION – I

- Q-1 Attempt the Following questions (07)**
- a. Define Nanoparticles **01**
 - b. Define Auxochromes. **01**
 - c. Define Cheminformatics. **01**
 - d. Define Chromophore and Auxochromes **02**
 - e. Write the Uses for nanotubes **02**
- Q-2 Attempt all questions (14)**
- A Write the Green and conventional synthesis of Paracetamol and Cipral. **05**
 - B Discuss the chemical vapor deposition method. **05**
 - C Write a note on applications of Nanoparticles. **04**
- OR**
- Q-2 Attempt all questions (14)**
- A Discuss the synthesis of nanoparticles. **05**
 - B Write the synthesis and uses of Methayl orange and Aurin. **05**
 - C Discuss the types of nanoparticles. **04**
- Q-3 Attempt all questions (14)**
- A What are dyes? Discus the types of dyes. **08**
 - B Discuss the Non-Textiles uses of dyes. **06**
- OR**
- Q-3 Attempt all questions (14)**
- A Illustrate the advances of synthetic dyes. **08**
 - B Write notes on:
1. Diamonds black 2. Malachite green **06**



SECTION – II

- Q-4** **Attempt the Following questions** **(07)**
- a. Define Green Chemistry. **01**
 - b. Gives difference between journal and Patents **01**
 - c. What are catalysts? **01**
 - d. Define polymers and polymerization **02**
 - e. Draw the structure of Adipic acid and Styrene **02**
- Q-5** **Attempt all questions** **(14)**
- A Discuss the Oxidation catalysts. **07**
 - B Write a note on Green synthesis-phase transfer catalyst. **07**
- OR**
- Q-5** **Attempt all questions** **(14)**
- A Write a note on polymer supported catalysts. **07**
 - B Discuss the applications of Microwave Chemistry. **07**
- Q-6** **Attempt all questions** **(14)**
- A Write a note on Green synthesis of
 - 1. Paracetamol
 - 2. Ibuprofen**08**
 - B Discuss the Use & Prospects of cheminformatics. **06**
- OR**
- Q-6** **Attempt all Questions** **(14)**
- A Discuss the Use of computer in chemistry and industry. **08**
 - B Write notes on : **06**
 - 1. Intellectual property rights
 - 2. Regulatory affairs.

