

Enrollment No:- _____

Exam Seat No:- _____

C.U.SHAH UNIVERSITY

Summer-2015

Subject Code: 4PS02PCH3

Subject Name: Pharmaceutical Chemistry-III

Course Name: B.Pharm

Date: 20/5/2015

Semester: II

Marks: 70

Time: 10:30 TO 01:30

Instructions:

- 1) Attempt all Questions in same answer book/Supplementary.
 - 2) Use of Programmable calculator & any other electronic instrument prohibited.
 - 3) Instructions written on main answer book are strictly to be obeyed.
 - 4) Draw neat diagrams & figures (if necessary) at right places.
 - 5) Assume suitable & perfect data if needed.
-

Q-1 Attempt the following (14)

- (A) Explain Bohr's atomic structure and atomic and molecular orbital concepts in detail.
(B) Explain bond energy, bond length, bond angle, electro negativity, Hydrogen bonding.

Attempt any four from Q-2 to Q-8.

Q-2 Attempt the following (14)

- (A) Explain reactions mechanism for inductive effect, mesomeric effect.
(B) Describe structure and stability of carbonium ions and carbocation ions and free radical.

Q-3 Attempt the following (14)

- (A) Give brief idea about substitution reactions with examples.
(B) Describe brief concept of elimination reaction with examples.

Q-4 Attempt the following (14)

- (A) Describe general methods of preparation and physical properties of alkanes.
(B) Explain free radical substitution reactions of alkanes.

Q-5 Attempt the following (14)

- (A) Write in detail general method of preparation and chemical reactions of cycloalkanes.
(B) Describe bayer strain theory and Schse- Mohr concept of strainless rings.

Q-6 Attempt the following (14)

- (A) Explain electrophilic addition reaction, markovnikov rule, antimarkonikov rule for alkenes.
(B) Write substitution and addition reactions in alkenes.

Q-7 Attempt the following (14)

- (A) Write in detail about SN¹ and SN² reactions.



(B) Explain general method of preparation and nucleophilic substitution reaction for alcohols.

Q-8 Attempt the following

(14)

(A) Describe general method of preparation for amines and basicity of amines.

(B) Write method of preparation, physical properties and chemical properties of ethers.

