

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

END SEMESTER EXAMINATION-2015

M. Pharmacy, Semester IV

COURSE CODE: 13M2WPY442

MAX. MARKS: 45

COURSE NAME: GREEN MEDICINAL CHEMISTRY

COURSE CREDITS: 03

MAX. TIME: 3 HRS

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Section A

Q1. Answer the following questions.

- I. Which of the following is usually regarded/not regarded as a characteristic of a green chemical compound? Why is it not so regarded? [2]
 - a) Readily biodegradable
 - b) Extremely high stability
- II. Give two examples of multi component reactions. [1]
- III. How dimethyl carbonate is green reagent. [1]
- IV. Write name and application of three green catalysts. [1.5]
- V. Explain why Diels alder reaction is accelerated in water? [1.5]
- VI. How water effect an ionic liquid? [2]

Section B

- Q2. How atom economy is calculated? Explain by taking example of Ibuprofen synthesis. [4.5]
- Q3. Explain utility of microwave assisted synthesis in green organic synthesis. [4.5]
- Q4. Explain the mechanism of photochemical reactions and give two examples of photochemical reaction. [4.5]

Section C

- Q5. Explain merits and demerits of biocatalyst. Discuss parameters which affect catalysts. Write one medical application of biocatalyst. [7.5]
- Q6. Evaluate current non food industrial uses of sugars. [7.5]
- Q7. Explain solid phase synthesis by taking suitable examples. Compare solid phase synthesis with solution phase synthesis. [7.5]