## BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI <br> (END SEMESTER EXAMINATION)

| CLASS: | M.PHARM | SEMESTER : IInd |
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| BRANCH: | PHARMACY | SESSION : SP/19 |

SUBJECT: MPC202T ADVANCED ORGANIC CHEMISTRY II
TIME:
FULL MARKS: 75

INSTRUCTIONS:

1. The question paper contains 7 questions each of 15 marks and total 105 marks.
2. Candidates may attempt any 5 questions maximum of 75 marks.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
Q.1(a) Describe the advantages and disadvantages of microwave assisted reactions
Q.1(b) Classify microwave assisted reactions with one example from each class
Q.2(a) Explain the following with equations (i)Isomerisation of alkenes (ikeri)Stercker reaction
Q.2(b) Describe the instrumentation for ultrasonic assisted reactions
Q.3(a) Elaborate conrotatory and disrotatory motions in ring opening reactions with suitable equations
Q.3(b) Elaborate conrotatory and disrotatory motions in ring closing reactions with suitable equations
Q.4(a) Define cycloaddition reaction with relevant equations.
Q.4(b) Classify cycloaddition reactions with one equation from each class
Q.5(a) Explain the advantages and disadvantages of homogenous reactions
Q.5(b) Explain the advantages and disadvantages of heterogenous reactions
Q.6(a) Elaborate the terms (i)Micro reactors (ii) Meso reactors in flow chemistry
Q.6(b) Explain the key concepts of small scale flow technologies
Q.7(a) Elaborate molecular dissymmetry with relevant diagrams.
Q.7(b) Define resolution of a racemic mixture and explain the methods employed.
