

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: M. Pharm
BRANCH: PHARMACY

SEMESTER: IIInd
SESSION: SP2022

SUBJECT: MPC202T ADVANCED ORGANIC CHEMISTRY II

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. The missing data, if any, may be assumed suitably.
 2. Before attempting the question paper, be sure that you have got the correct question paper.
 3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Explain the advantages and disadvantages of microwave reactions. Elaborate the material used in microwave reactions and classify the same. [7]
- Q.1(b) Elaborate the instrumentation involved in ultrasound synthesis with diagrams. Deliberate the various types of sonochemical reactions [8]
- Q.2(a) Define flow chemistry and elaborate the processes used in flow chemistry [7]
- Q.2(b) Describe (i)Microreactors (ii)Construction materials with relation to flow processes [8]
- Q.3(a) Explain combinatorial synthesis with respect to solid phase techniques [7]
- Q.3(b) Define the following (i)Photolithography (ii) Tagging of compounds [8]
- Q.4(a) Detail out recursive deconvolution with proper examples [7]
- Q.4(b) Elaborate how will you design a combinatorial library. [8]
- Q.5(a) Explain conrotatory and disrotatory motions with respect to electrocyclic reactions with examples [7]
- Q.5(b) How will open chain conjugated system behave in electrocyclic reactions. Exhibit with diagrams [8]
- Q.5(c)
- Q.6(a) Detail out the different type of catalysts with examples [7]
- Q.6(b) Explain the uniqueness of phase transfer catalysts with various reactions [8]
- Q.7(a) Define i)Enantiomers (ii)Diastereomers (iii) Meso isomers (iv)Resolution [7]
- Q.7(b) Explain the cis trans isomers with reference to z and e isomers [8]

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