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**BRAINWARE UNIVERSITY****Term End Examination 2024-2025****Programme – M.Pharm(PC)-2024****Course Name – Advanced Organic Chemistry-II****Course Code - MPC202T****(Semester II)****Library****Pharmaceutical Technology
Brainware University
Barasat, Kolkata-700125****Full Marks : 75****Time : 3:0 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A**(Short Answer Type Questions)****5 x 5=25**

1. List out twelve principles of green chemistry with short description. (5)
2. Explain the principle of microwave assisted synthesis. (5)
3. Describe the characteristic features of enantiomers. (5)
4. Illustrate different heterocyclic synthesis by ultrasound mediated reaction. (5)
5. Summarize the different applications of heterogeneous Catalyst. (5)

OR

Estimate quantum yield by giving formation and decomposition reaction.

(5)**Group-B****(Long Answer Type Questions)****10 x 5=50**

6. Illustrate the Sonochemical reactions by showing the three regions. (10)
7. Explain the transition metals catalyst with examples. (10)
8. Explain the organo catalysis with asymmetric reactions examples. (10)

9. Explain the preparation mechanism, limitation and uses of Ziegler–Natta Catalyst. (10)

OR

Explain the classification of catalyst based on the nature of Phase. (10)

10. Explain the synthesis of peptides by t- Butyl carbonyl protecting group (BOC) strategy. (10)

OR

Explain the synthesis of peptides by Fluorenyl methyl oxy carbonyl protecting group (FMOC) strategy. (10)