U.G. 2nd Semester Examination - 2021

CHEMISTRY

[HONOURS]

Course Code : CHEM-H-CC-P-04

[PRACTICAL]

Full Marks : 20 Time : 2 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

(Organic)

GROUP-A

Answer any **two** of the following: 5×2=10

1. Briefly outline the synthetic procedure of acetanilide in the laboratory and mention the required reagents for this conversion. Write the overall chemical reaction of this transformation. 4+1
2. Outline the synthetic procedure of m-dinitrobenzene in the laboratory and mention the required reagents for this conversion. Write the overall chemical reaction of this transformation. 4+1
3. Briefly discuss the green approach for the synthesis of benzilic acid in the laboratory and mention the required reagents for this synthesis. Write the overall chemical reaction of this transformation. 4+1

4. Discuss the laboratory procedure of hydrolysis of benzamide. What product will you get in this reaction? Write the chemical reaction. 4+1

GROUP-B

Answer any **five** of the following: 2×5=10

1. Discuss the green approach in synthetic organic chemistry. 2
2. Describe the method of recrystallisation of an unknown organic compound mostly soluble in water. 2
3. Why determination of melting point is important for a given solid sample? 2
4. Mention any two solid brominating reagents with correct structure. 2
5. What are the differences between sharp melting point and indefinite melting point? 2
6. Why recrystallisation is most frequent operation in practical organic chemistry? 2
7. 5 gm of ethylacetate on hydrolysis produces 3 gm of acetic acid. Calculate the percentage (%) of the yield of acetic acid. 2

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