



MANIPAL
ACADEMY of HIGHER EDUCATION
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DEPARTMENT OF SCIENCES, III SEMESTER M.Sc (CHEMISTRY)
END SEMESTER LAB EXAMINATIONS, DEC. 2020

SUBJECT: MULTISTEP ORGANIC SYNTHESIS [CHM-6105]
(REVISED CREDIT SYSTEM-2017)

Time: 6 Hours

Date: 24-12-2020

MAX. MARKS: 40

Note: Answer the question I in the first 30 minutes

- I. A.** Write the procedure of multistep synthesis of 1,3,5-tribromobenzene from aniline.
Write the chemical reaction and calculate the theoretical yield in both the stages of the synthesis.

[5]

I. B. Answer the following questions

1. Write the reaction mechanism of conversion of phthalimide to anthranilic acid
2. Give reason: Diazotization reaction is carried out at low temperature.
3. Write the chemical reaction involved in the preparation of benzanilide from benzophenone.
4. Why are carboxylic acids converted to esters or acid chlorides while preparing acid hydrazides.
5. Justify the statement: Reduction of m-dinitrobenzene with NaSH gives m-nitroaniline as major product.

[5]

II. A. Perform the given experiment

[25]

B. Submit the laboratory record for evaluation

[5]
