



DEPARTMENT OF CHEMISTRY
ANUGRAH MEMORIAL COLLEGE
GAYA - 823001 (Bihar)

(A Constituent Unit of Magadh University, Bodh-Gaya)

Ref. No.

Date 27/03/2023

Programme of B. Sc. Part III Chemistry (Hons) Practical Examination - 2021

Session: 2018 – 2021

Paper - VIII

Date	Sitting	Time	Univ. Roll Nos.
01-04-2023	I	10:30 AM – 04:30 PM	2132100019 - 2132100094

Note: -

1. All students (examinees) are directed to bring their
 - a) Chemistry (Hons) practical note book.
 - b) Admit card of B. Sc. Part – III (Hons) Examination - 2021.
 - c) College identity card / admission receipt.
2. Kindly report in the Department of Chemistry before 10:15 AM.

P.R. Pandey
27-03-2023

H. O. D.

Head

Dept. of Chemistry
A. M. College, Gaya

GROUP—A

- 1 Qualitative inorganic analysis of mixture containing six radicals e.g. these give below one interfering radical must be there.**

Basic radicals : Ag^+ , Hg^{+2} , Pb^{+2} , Bi^{+3} , Cd^{+2} , Cu^{+2} .

(29)

Sn^{+4} , Fe^{+3} , Al^{+3} , Cr^{+3} , Ni^{+2} , Co^{+2} , Co^{+3} , Zn^{+2} ,

Mn^{+2} , Ca^{+2} , Ba^{+2} , Sr^{+2} , Mg^{+2} , Na^+ , K^+ , NH_4^+ .

Acid radicals : CO_3^{-2} , SO_4^{-2} , SO_3^{-2} , S^{-2} , NO_3^- , NO_2^- .

Halides. Oxalate, Acetate, Borate, Phosphate.

GROUP—B

— 40 Marks

- 1 Preparation of organic compounds :—**

a) Acetylation of salicylic acid, aniline and p-toluidine.

b) Benzoylation : Preparation of benzanilide and benzoyl derivative of p-toluidine.

c) Nitration : preparation of p-nitroacetanilide picric acid, and m-dinitrobenzene.

d) Reduction—Preparation of m-nitroaniline from m-dinitrobenzene.

e) Oxidation : Preparation of (i) benzoic acid from benzaldehyde, and (ii) anthranilic acid anthracene.

f) Esterification : Preparation of ethyl benzoate.

- 2 Determination of the molecular weight of organic acids by silver salt method.**

- 3 Volumetric estimation of glucose.**

N. B. and Viva.

—20 marks