

B.Sc. III Year
Paper-XXI (CH-307) Practicals

Max.Marks:60**Time: 7 Hrs.****(One day in two sessions i.e. 9:00AM-12:30PM and 1:30PM-5:00PM)****Section-A (Inorganic)**

Semimicro qualitative analysis of mixture containing not more than four radicals (excluding interfering, Combinations and insolubles):

Pb^{2+} , Hg^{2+} , Hg_2^{2+} , Ag^+ , Bi^{3+} , Cu^{2+} , Cd^{2+} , As^{3+} , Sb^{3+} , Sn^{2+} , Fe^{3+} , Cr^{3+} , Al^{3+} , Co^{2+} , Ni^{2+} , Mn^{2+} , Zn^{2+} , Ba^{2+} , Sr^{2+} , Ca^{2+} , Mg^{2+} , NH_4^+ , CO_3^{2-} , S^{2-} , SO_3^{2-} , $S_2O_3^{2-}$, NO_2^- , CH_3COO^- , Cl^- , Br^- , I^- , NO_3^- , SO_4^{2-} , $C_2O_4^{2-}$, PO_4^{3-} , BO_3^{3-}

Section-B (Physical)

1. To determine the strength of the given acid solution (mono acid only) conductometrically.
2. To determine the solubility and solubility product of a sparingly soluble electrolyte conductometrically.
3. To determine the strength of given Ferrous ammonium sulphate solution potentiometrically.
4. To determine the molecular weight of a non-volatile solute by Rast method.
5. Preparation of acidic and basic buffers and comparison of their pH with theoretical values.
6. To determine the specific rotation of optically active substance (any two).

Section-C (Organic)**1. Thin Layer Chromatography**

(Determination of R_f values and identification of organic Compounds)

Separation of a mixture of coloured organic compounds using common organic solvents.

2. To separate the binary liquid mixtures using distillation.**3. Synthesis of the following organic compounds:**

- (a) To prepare salicylic acid from Aspirin.
- (b) To prepare p-bromoaniline from p-bromoacetanilide.
- (c) To prepare m-nitroaniline from m-dinitrobenzene.
- (d) To prepare S-Benzyl-iso-thiouonium chloride from Thiourea.

Distribution of marks

1.	Section- A	15 marks
2.	Section-B	15 marks
3.	Section-C	15 marks
4.	Viva-voce	05 marks
5.	Lab Record	10 marks

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KURUKSHETRA UNIVERSITY, KURUKSHETRA

(Established by the State Legislature Act XII of 1956)

B.Sc III year EXAMINATION, 200 July 2022

PRACTICAL ATTENDANCE CHART

Chart for Preparing List of each group for Practicals in Science and other Subjects.

Centre for Written Examination I. G. N. College LADWACentre for Practical Examination I. G. N. College LADWASubject CHEMISTRY, CH-307 Date 21.07.2022Group II Time 9:00 AM to 4:00 PM (M-E)

Sr.No.	Roll No.	Signature of the Candidate before the Principal	Signature of the Candidate before the Practical Examiner	Signature of the Candidate before the Practical Examiner
1	180037737	Salil	Salil	Salil
2	191038312	Ekta Devi	Ekta Devi	Ekta Devi
3	191038314	Ashish	Ashish	Ashish
4	191038318	Manpreet Kaur	Manpreet Kaur	Manpreet Kaur
5	191038320	Pooja Devi	Pooja Devi	Pooja Devi
6	191038322	Divya	Divya	Divya
7	191038323	Kajal	Kajal	Kajal
8	191038324	Jyoti Devi	Jyoti Devi	Jyoti Devi
9	191038326	Komal	Komal	Komal
10	191038329	Gurwinder Singh	Gurwinder Singh	Gurwinder Singh
11	191038332	Pallavi	Pallavi	Pallavi
12	191038333	Komal	Komal	Komal
13	191038334	Ashish	Ashish	Ashish
14	191038335	Harshat	Harshat	Harshat
15	191038336	Harshat	Harshat	Harshat
16	191038337	Vanshika	Vanshika	Vanshika
17	191038338	Jyoti Rani	Jyoti Rani	Jyoti Rani
18	191038339	Jyoti Rani	Jyoti Rani	Jyoti Rani
19	191038345	Ishika	Ishika	Ishika

Total No. of Candidates allotted by the Principal 19Total No. of Candidates examined by the Examiner 19Total No. of Candidates absent in the Practical Examination NIL

Signature of Principal

Address I. G. N. College, Ladwa

Signature of Practical Examiner

Address MS. MANJEET RANIChem. Deptt. MLN College, Yamuna Nagar

Signature & Address of the

Co-Examiner (if any)

Dr. AMIT KUMARChem. Deptt. I.G.N college Ladwa

(To be sent to the Deputy/Asstt. Registrar (Secrecy) alongwith Award-Lists in the Confidential Envelope (ES-(42)(5).)