HIGHER SECONDARY EXAMINATION FEB/MARCH -2020

Subject: Chemistry – Practical

Maximum Score : 40 **Time : 3 Hrs.**

1. Estimate the mass of ..... in the whole of the given solution.

   You are provided with a standard solution of .....

   containing ..... Grams/litre (Score -12)

2. Briefly write the principle and procedure for the above estimation within first five minutes. (Score -3)

3. Analyse the given salt, identify and confirm systematically the anion and cation present in it. (Score -10)

4. Analyse the given organic [illegible] and confirm the functional group present in it. (Score -6)

a. Viva voce (Score -2)

5. Practical record (Score -4)

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2. Briefly write the principle and procedure for the above estimation within first five minutes. (Score -3)
3. Analyse the given salt, identify and confirm systematically the anion and cation present in it. (Score -13)
4. Analyse the given organic compound, identify and confirm the functional group present in it. (Score -6)
5. Viva voce (Score -2)
6. Practical record (Score -4)

EVALUATION OF CHEMISTRY PRACTICALS – DETAILS

Total Score

1. Practical Record

   a. Basic Laboratory techniques -1/2

   b. Physical Chemistry Experiments (two) -1/2

c. Reactions of anion an cation - 1 2

d. Salt analysis (6 Salts) 1

e. Identification of functional groups (Four) -1/2

f. Volumetric analysis (Four) -1

2. Viva voce: informal simple questions to know the awareness on Chemistry practical. -2

3. Qualitative analysis (Score -13)

a. Systematic Analysis of anion -1
b. Identification test for anion -3

c. Conformation test for anion -2
d. Systematic Analysis of cation -1
e. Identification of group -2
f. Identification test for cation -2.
g. Conformation test of cation -2

4. Functional group analysis of organic compound (Score -6)

a. Identification of functional group(One Test) -3
b. Conformation of functional group(One Test)

5. Qualitative analysis (Single Titration –Score 12) -3

a. Tabulation and recording
(Acidimetric/Alkalimetery/Permanganometry) -2

b. Calculation
I.Normality of standard solution -1

II.Normality of solution to be estimated -1

III.Correct equivalent masses. -1

IV.Correct calculation of the result with unit. -2

i. Error within 2% (Full score) -5

ii. Error up to 3% -4

iii. Error above 3% -3

6. Principal and procedure for quantitative analysis (Score 5)

a. For writing the chemical equation -1

b. Procedure (Score 2)

Solution in pipette	½
Solution in burette	½
Indicator used	½
Colour change	½

Note

i. The procedure for qualitative analysis should be obtained in details

ii. The student has to make up the solution for estimation

iii. Normality or molarity may be used as the concentration for qualitative analysis.

iv. Systematic analysis should be followed in salt analysis.

v. At least four different types of question papers may be used.

vi. Certified record should be produced.

vii. Permanganometry should be given for at least one batch of students.

viii. Random checking of burette readings may be done by the external examiners.

ix. Do analysis of organic compound given.