CLASS - XII

QUALITATIVE ANALYSIS

MARKS: 08

EXPT. NO.1	To analyse the given inorganic salt qualitatively and detect one cation and one anion present in it.
	PROBABLE SALT
Group :Zero	Ammonium Chloride, Ammonium Sulphate, Ammonium Phosphate
First Group	Lead Acetate
Second Group	Copper Chloride, Copper Nitrate, Copper Sulphate
Group Three	Aluminium Chloride, Aluminium Sulphate, Aluminium Nitrate, Ferrous Sulphate, Ferric Chloride.
Group Four	Nickel Sulphate, Nickel Chloride, Nickel Nitrate, Zinc Sulphate, Zinc Chloride, Zinc Nitrate
Group Five	Barium Chloride, Barium Nitrate, Strontium Chloride, Strontium Nitrate
	POINTS TO BE NOTICED
1.	Sample no to be written
2.	Aim of the experiment to be written
3.	Apparatus/Chemical required are not to be written
4.	No theory required to be written
5.	Procedure in tabular form should be written. (As per the procedure format given – first anion followed by cation)
6.	Chemical equation of the reaction of the preliminary test group analysis and confirmatory test are to be written.
7.	Result to be written
8.	Precaution **NOT TO BE WRITTEN**
	GENERAL INSTRUCTION
1.	Apron is compulsory
2.	Small towel/ Hankee is compulsory
3.	Writing pad is permitted
4.	Keep the answer sheet away from water and other chemicals
5.	Write all the details of the experiments done by you neatly and systematically.

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VOLUMETRIC ANALYSIS

EXPT. NO.2	MARKS: 08
AIM:	
A:	Prepare 250ml/100ml standard $M/_{10}$ or $M/_{20}$ Mohr's Salt/Oxalic acid solution by taking exact weight.
B:	Determine the molarity and strength of the given $KMnO_4$ Solution by titrating it against the standard solution of Mohr's salt/oxalic acid prepared.
	INSTRUCTIONS
1.	Aim of the experiment to be written
2.	Apparatus/Chemicals required to be written
3.	No theory or procedure to be written
4.	Calculations showing the amount of OA/ mohr's salt to be weighed to prepare the required solution should be written
5.	Note the weight of empty china dish/watch glass = W_1 Note the weight of China dish/watch glass + Salt = W_2 weight of the salt required to prepare the solution = $W_2 - W_1$
6.	Precaution (any two) to be written
7.	Result to be written

PART:B

1.	Aim, Apparatus/Chemicals required, theory chemical equation (balanced ionic equation) to be written				
2.	Solution taken in burette, solution taken in the conical flask, End point, indicator used to be written.				
3.	Tabular should be drawn with pen & scale and data to be entered with pen not pencil.				
Sl. No.	Volume of OA or Mohr's Salt Solution	Burette reading		Volume of $KMnO_4$ used	Concordent reading
		Initial	Final		
4.	Formula used to be written (Only molarity formula) = $\frac{V_1M_1}{n_1} = \frac{V_2M_2}{n_2}$				
5.	Explanation for the terms in the formula to be written				
6.	For calculation concerdents reading to be taken not average.				
7.	Result (with unit) to be written				
8.	Precaution (any two) to be written.				

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MARKS: 06

EXPT. NO. 3	
	CONTENT BASED EXPERIMENT
	CHROMATOGRAPHY
AIM	Seperation of pigments from the extract of leaves/ flowers by ascending paper chromatography and comparison of their R_f values.
	INSTRUCTIONS
1.	AIM, Apparatus/Chemical required to be written.
2.	A brief theory about paper chromatography to be written (Refer Class 11 Chemistry NCERT text Vol-II)
3.	Proper tabular column, Formula used and calculation of R_f value to be written
4.	Result to be written
5.	Precaution (any two) to be written
6.	Chromatogram (the paper) to be stuck to the answer sheet where this experiment is written

MARKS: 04

EXPT. NO. 4	
	INVESTGATORY PROJECT
1.	It should be hand written in paper file and should contain a. Title page b. Certificate page c. acknowledgement page d. Index page e. Content, diagram/pictures/photo/graphs etc. and f. bibliography
2.	It should be certified, sealed and signed by the subject teacher.

MARKS: 04

EXPT. NO. 5	
	CLASS RECORD & VIVA
1.	It should contain 1) at least 10 qualitative analysis 2) 4 volumetric analysis and 3) One chromatograph expt.
2.	Practical note book should be neatly covered with fresh brown paper with name, board roll no. and other details written.
3.	Index should be completed and got sealed and signed by the subject teacher.

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