

UG 1<sup>st</sup> Semester Examination 2020  
(Blended Mode)  
Chemistry  
Programme Course  
Inorganic and Organic Chemistry (Practical)

Full Marks- 20

Time- 2 Hours

Group-A (Inorganic Chemistry)

Answer any one from the following :- 10×1=10

- i) Give major difference between primary standard and secondary standard solutions. Is  $\text{Na}_2\text{S}_2\text{O}_3$  a Primary or Secondary Standard solution and why? Find out the equivalent weight of  $\text{K}_2\text{Cr}_2\text{O}_7$ . Give the formula of more salt. 2+2+4+2
- ii) What do you mean by Molarity and Normality of a solution? In which  $\text{P}^{\text{H}}$  range does Methyl Orange works? How do you prepare standard 250 ml ( $\text{N}/_{20}$ ) Oxalic Acid Solution? Is  $\text{P}^{\text{H}}$  maintenance is required in an Idometric estimation – why? 2+1+4+3

Group-B (Organic Chemistry)

Answer any one from the following :- 10×1=10

- i) How can you identify 'N' as an element in a sample? Give the structure of Salicylic Acid. Is Phenols are acidic in nature? When treated with  $\text{FeCl}_3$  which colours they produce? Give one example with reaction. 3+1+1+1+4
- ii) What is back-dye test? How can we prepare Tollen's reagent in laboratory? How can you identify –  $\text{COOH}$  group in your sample? Give the full name of D.N.P. and which functional group helps to detect? 2+2+3+3
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