M.Sc (Industrial Chemistry) 1st year (Sem-II),
In-semester Examination; June 2021

Time: 1 hr **Max. Marks: 25**

Note: Attempt all questions

Q1 a) Discuss and differentiate TOP down and BOTTOM up methods for the preparation of nanomaterials.

b) Discuss any two methods in details for the synthesis using BOTTOM up approach. **(6)**

Q2 a) Write a note on homogenous and heterogenous nucleation.

b) Explain nucleation rate, growth rate and transformation rate during formation of nanomaterials. **(6)**

Q3 What do you mean by electric double layer? Explain the modern structure of the electric double layer**.** **(6)**

Q4 Derive Lippmann's equation**.** **(7)**