

B.Sc Part-III (Hons) Practical Examination' 2021

(Under 1+1+1 system)

Gurudas College Centre

Subject: Physical Chemistry

Paper – VIIB

Time: 1hr 30 min

F.M.- 25

1. Write the theory/ principle behind the given experiment.
2. Represent the experimental data (supplied) according to the given experiment in proper tabular form.
3. Calculate the result of the given experiment according to the supplied experimental data. [8 + 8 + 9]

Experiment:

Determination of the relative viscosity coefficient of a given solution using Ostwald viscometer

Data:

- a. Temperature: 25°C
- b. Data regarding specific gravity measurement:

Mass of dry and empty specific gravity bottle - 9.18 gm

Mass of specific gravity bottle filled with water (density = 1gm/ml) - 19.135 gm

Mass of specific gravity bottle filled with given solution -19.574 gm

- c. Data regarding time of flow measurement of fixed vol water and given solution:

Time of flow for water (measured three times):

1 min 46 sec, 1min 45 sec, 1 min 46 sec

Time of flow for given solution (measured three times):

1 min 55 sec, 1 min 56 sec, 1 min 57 sec