

Government General Degree College, Dantan-II

5th Semester B. Sc (H) Internal Examination-2021

Subject: Chemistry

Paper: DSE-2T

F.M: 20

Time: 1h

Answer the following questions (*any ten*)

10×2

1. Differentiate between determinate and indeterminate errors.
2. What are accuracy and precision?
3. Write short note on TLC.
4. Calculate the relative error in parts per thousand in the result of an analysis when the experimental value and the expected value is 15.02 g.
5. The set of data obtained during estimation of hardness of replicated water sample are as follows:
102.2, 102.8, 103.1, 102.3 ppm of CaCO₃. Calculate the standard deviation of the results.
6. What do you understand by column chromatography.
7. Draw and explain conductometric titration curve for HCl versus ammonium hydroxide.
8. What are ion exchangers and what are their characteristics?
9. What is Franck-Condon Principle?
10. What is photomultiplier tube?
11. Write down the principle of Job's continuous variation method.
12. What are OPD and ZPD?
13. Write the basic principle of Size exclusion chromatography.
14. What is ion exchange chromatography?
15. Write down the principle of potentiometric titration.