

B.Sc. 1st year (2024-2025)
CCE -1 (Major-II/Minor/Open elective)
Department of Chemistry
Paper Name: Analytical Chemistry
(GOVT. COLLEGE NAGDA)

Note: Last date to submit this CCE is 20 october 2024

Question 1: Objective type questions.

- i) Differentiation of $\tan X$ is:
($\tan X$ का अवकलन है):
 - a) $\cos X$
 - b) $-\sin X$
 - c) $\tan X$
 - d) $\sec^2 X$

- ii) Initial name of windows is :
(विंडोज का प्रारंभिक नाम है)
 - a) Interface manager
 - b) MS window
 - c) DOS
 - d) All above

- iii) Data can be store permanently:
(डाटा को स्थायी तौर पर सुरक्षित रखा जा सकता है)
 - a) In memory (मेमोरी में)
 - b) In ALU (ALU में)
 - c) In memory and CPU (मेमोरी और CPU में)
 - d) In all above(उपयुक्त सभी)

- iv) Spraying reagent used for identification of amino acids :
(एमिनो अम्लों के विकास हेतु प्रयुक्त अभिकर्मक है)
- Iodine
 - Bromine
 - KMnO₄
 - Ninhydrin

Question 2. Short answer type questions:

- 1) What do you mean by thin layer chromatography?
Explain.
- 2) Explain any four sources of error in analytical chemistry.
- 3) What is chemical equilibrium? Describe with example.

Question 3. Long answer type questions:

- 1) What is electronic transition? Write types of electronic transitions. Explain effect of conjugation on electronic transition with example.
- 2) Write note on:
 - a) Normality
 - b) Molarity
 - c) Molality
 - d) Paper chromatography
 - e) Column chromatography