



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE
(AUTONOMOUS) (Grant-in-Aid)
Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120



Bachelor of Science (Semester 2) Internal Examination - 2026
US04MICHE01 : ANALYTICAL CHEMISTRY-II

Date: 10-03-26 TUESDAY

Time: 2:45 PM TO 3:45 PM

Total marks :20

Note : figures to the right indicate marks of the question.

Q-1 Write the most appropriate answer from the following multiple-choice questions.

[06]

- (1) The process of measuring the volume of titrant required to reach the Equivalence point is called _____.
(A) standardization (B) Neutralization
(C) Titration (D) All of the above
- (2) A chemical substance which is use to indicate completion of the reaction is known as _____.
(A) Acid (B) Indicator
(C) Buffer solution (D) All of the above
- (3) 100 grams of KHCO_3 is dissolved in 5 liter solution. Calculate percentage of a solution
(A) 1.0 (B) 0.2
(C) 2.0 (D) 0.1
- (4) Temporary hardness is due to _____ of Ca and Mg.
(A) Sulphates (B) Chlorides
(C) Bicarbonates (D) Carbonate
- (5) Platinum Cobalt Method is used to determine _____ of the water
(A) Colour (B) Turbidity
(C) Odour (D) Total dissolve solid
- (6) Nephelometer is used to determine _____ of the water
(A) Colour (B) Turbidity
(C) Odour (D) Total dissolve solid

Q-2 Discuss classification of reactions in titrimetric analysis

[07]

OR

Q-2 Show that the color change range, pH of the system is $\text{pH}=\text{pKIn}\pm 1$.

[07]

Q-3 What is water pollutant? Classify water pollutant and explain each of them.

[07]

OR

Q-3 Write a note on water analysis with respect to acidity and alkalinity of water sample.

[07]



No of printed pages: 01

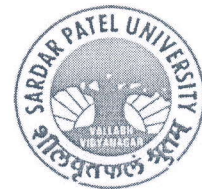
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BSC (Semester -2) Quiz - 2026
US04MICHE01 : ANALYTICAL CHEMISTRY-II

Date: 10-03-26 TUESDAY

Time: Maximum 10 minutes

Total marks :05

Q-1 Answer with either true or false.

- (i) The solution filled in the conical flask during titration is known as titrant . []
- (ii) A substance available in a pure form which is used in standardizing a solution is primary standard []
- (iii) What is the pH range of strong acid is 3.1 to 6.9 []
- (iv) Dissolved oxygen is an important requirement of the aquatic life []
- (v) Forel Ule Colour Scale Method gives a qualitative recognize of the colour of sample in water analysis []

