

Hemchandracharya North Gujarat University, Patan

Bachelor of Vocation

Pharmaceutical Chemistry Semester II

Mid SEM Examination, March - 2017

Subject: Analytical chemistry (PC – 214)

Time: 2 hrs

Date: 24/03/17

Marks: 60

Q.1 Answer any 12 questions. Each question carries 1 mark

[12*1=12]

1. How many significant Figures of 50.4.
2. Give the formula of Q – test.
3. HPLC is classical method. (True/False)
4. What is the Mode of given data: 10.04, 9.4, 10.04, 9.7, 9.8
(a) 10.04 (b) 9.4 (c) 9.8 (d) 9.7
5. Give the formula of standard deviation.
6. Full form of UV is _____
7. Median of 0.122, 0.124, 0.126, 0.128, 0.130
(a) 0.122 (b) 0.124 (c) 0.126 (d) 0.130
8. Difference between true value and observed value is defined as _____
(a) Error (b) Mean (c) Median (d) Mode
9. Give the name of any one Instrumental method.
10. Full form of HPLC - _____
11. Measurement of Conductance is possible in _____
(a) Potentiometry (b) Conductometry (c) pH-metry (d) Electrophoresis
12. Define Analytical Chemistry.

Q.2 Answer any 5 questions. Each question carries 04 marks

[5*4=20]

1. Explain Accuracy and Precision in detail.
2. Write a short note on literature of analytical chemistry.

3. Analysis of a group of sample gave the following data. 29.03, 29.08, 28.97 and 29.24. Apply Q test to see whether the data 28.97 should be retained or rejected.

Value of Rejection Quotient, Q

No. of Observation	Q _{0.90}
3	0.94
4	0.76
5	0.64
6	0.56

4. Write steps of analysis.
5. Give any four names of chemical methods of Modern classification.
6. Write a short note on confidence interval.

Q.3 Answer any 4 questions. Each question carries 07 marks

[4*7=28]

1. Write difference between Instrumental and Classical Methods.
2. What is Error? Give the Classification of Errors.
3. Analysis of a sample of brass ore gave the following percentage values for the iron content: 5.12, 5.10, 5.11, 5.09, 5.16, 5.14, 5.07, 5.14, 5.18 and 5.11. Calculate Mean, Median, Standard deviation.
4. Write a short note on correlation & Linear regression.
5. Write rules for retaining significant figures.