



QP CODE: 24803816



24803816

Reg No :

Name :

INTEGRATED MSC DEGREE EXAMINATION, JULY 2024

Fourth Semester

INTEGRATED MSC BASIC SCIENCE-CHEMISTRY

CORE - ICH4CR02 - ANALYTICAL CHEMISTRY

2020 Admission Onwards

47E8F01D

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

Answer any **eight** questions.

Weight **1** each.

1. Define Mean ,Median and Mode.
2. Define and state an example of gross error.
3. How do you plot a calibration curve?
4. What is meant by gross sampling?
5. How water is determined by direct method?
6. Mention the use of Na_2CO_3 and Na_2O_2 as flux.
7. What are airpollutants?
8. Which is the best disposal method for hazardous waste?
9. Mention the criteria for selecting instrumental methods.
10. Mention some of the applications of isotope dilution method

(8×1=8 weightage)

Part B (Short Essay/Problems)

Answer any **six** questions.

Weight **2** each.

11. Explain hypothesis testing using statistical analysis.
12. Write note on decomposition and dissolution reagents 1) H_2SO_4 2) HNO_3 3)HF
13. Describe the methods adopted for elimination of interference from samples.





14. Elaborate on BOD and COD.
15. Write note on corrosion analysis.
16. Mention some criteria for selecting instrumental methods.
17. Briefly explain laser ablation.
18. Account on thermometric titrations.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Write note on pesticide and pollution? Explain the classification, degradation and pesticide analysis.
20. Briefly account on the principle and instrumentation of AAS. Write its application.
21. Explain briefly the principle ,instrumentation and application of AES.
22. What is DTA? Explain its principle instrumentation and its application.

(2×5=10 weightage)

