25019616

QP CODE: 25019616

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

B.Sc Food Science & Quality Control Model III

Core Course - FS4CRT12 - ANALYTICAL INSTRUMENTATION

2017 Admission Onwards

D41F4AA1

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. List an example of polar adsorbant.
2. Define non ideal size exclusion system.
3. Mention the equillibration in thin layer chromatography.
4. Explain what type of mobile phase can be used for HPLC.
5. Define GLC.
6. Define pore size in column packing.
7. Mention the criteria for classification of spectroscopy.
8. Mention the UV - visible range of radiation.
9. Define wick in electrophoresis.
10. Define negatrons.
11. Define ionisation of gases.
12. Define sandwich ELISA.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain the supports in partiton chromatography.

14. List the examples of ligands.

15. Explain about the collection of sample as fractions in column chromatography.

16. Explain the recorder or data system used in HPLC system.

17. Explain the matrix in GLC.

18. Mention about the atomisers used in AAS.

19. Discuss about the casting of gel for native gel electrophoresis.

20. Mention the principle of radio immuno assay.

21. Explain application of pectinases in food industry.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Draw paper chromatography and explain with a schematic diagram.

23. List the detectors of GLC.

24. Explain the fluorescence spectrophotmeter with a schematic diagram.

25. Explain about the electrophoresis of nucleic acids by agarose gel electrophoresis.

(2×15=30)