QP CODE: 24027309

24027309

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

B.Sc Food Technology & Quality Assurance

Core Course - FQ3CRT02 - FOOD ANALYTICAL INSTRUMENTATION

2017 Admission Onwards

C34614F4

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Define chromatography.
2. Write a note on carrier gas.
3. Explain BEER'S law.
4. What are criteria for a compound to absorb IR radiation?
5. What is nuclear magnetic resonance?
6. What is Sievert?
7. List out the applications of ionization chamber.
8. What is the principle of liquid scintillation technique?
9. What do you understandby buffers?
10. Add a note on gel electrophoresis.
11. What is swinging bucket rotor?
12. What is differential centrifugation?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Write a note on sample preparation for gas chromatography.
14. Write a note on HPLC column.
15. Describe hollow cathode tube.
16. Discuss about ICP-AES.
17. Explain Flourimetry.
18. Describe gold leaf electroscope with a neat diagram.
19. Write a note on capillary electrophoresis.
20. Write short note on Native-PAGE.
21. Give an account of Solid–liquid centrifuges.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Briefly explain the importance and working principle of paper chromatography and TLC in food industry.
23. Write a detailed note on techniques and working of UV Spectrophotometer.
24. Illustrate gas filled detectors with neat and labelled diagrams.
25. Give an account of different zone electrophoresis techniques.

(2×15=30)