

G 4724

18

(Pages : 2)

Reg. No.....

Name.....

**B.VOC. DEGREE EXAMINATION, APRIL 2019**

**Sixth Semester**

**ANALYTICAL METHODS IN FOOD PROCESSING**

(For B.Voc. Programme in Food Processing Technology)

Time : Three Hours

Maximum : 80 Marks

**Part A**

*Answer all questions.*

*1 mark each.*

Comment on the following :

1. Mobile phase.
2. Enzyme inhibitors.
3. Substrate.
4. Fluorescence.
5. Rf value.
6. Uses of agarose gel.
7. A radioisotope used in analysis of food products.
8. Chromatography paper.
9. Solute.
10. Energy of activation.

(10 × 1 = 10 marks)

**Part B (Answer Briefly)**

*Answer any eight questions.*

*2 marks each.*

Write about :

11. Electromagnetic spectrum.
12. Cathode and anode.
13. Uses of silica gel in analytical techniques.
14. Packed column.

**Turn over**

15. Flourimetry.
16. Acrylamide.
17. Spectroscopy.
18. Induced fit theory.
19. Catalyst.
20. A method to detect pesticide in food material.
21. SDS.
22. Geiger counter.

(8 × 2 = 16 marks)

### **Part C (Short Essay Type Questions)**

*Answer any **six** questions.  
4 marks each.*

23. Explain importance of GC and GLC.
24. Write about radioactivity.
25. Explain how proteins can be separated.
26. Explain atomic emission and atomic absorption.
27. Write a note on scintillation counter.
28. Write a note on reaction mixtures.
29. Write about application of chromatography in food industry.
30. Give an account of principle and applications of NMR.
31. Explain importance of analytical techniques in food safety.

(6 × 4 = 24 marks)

### **Part D (Long Essays)**

*Answer any **two** questions.  
15 marks each.*

32. Give an outline of different types of chromatography.
33. Explain working of infrared spectroscope and uv spectrophotometer.
34. What is an enzyme ? Explain how reaction rate and enzyme activity can be measured.
35. Define electrophoresis. Describe different types of electrophoresis.

(2 × 15 = 30 marks)