

**G 18001617**



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**Reg. No.....**

**Name.....**

**M.Sc. DEGREE (C.S.S.) EXAMINATION, JUNE 2018**

**Second Semester**

Faculty of Science

Branch : Food Technology and Quality Assurance/Food Science and Technology/Food  
Science and Quality Control

**FT2 MDC 710—FOOD ANALYSIS**

Time : Three Hours

Maximum Weight : 30

**Part A (Short Answer Type Questions)**

*Answer any **five** questions out of the following.  
1 weight each.*

1. Define  $R_f$  value ? Write its significance.
2. Briefly discuss on Rotational viscometer.
3. State Beer and Lambert's law.
4. What is score card ? Explain its importance in sensory evaluation.
5. Describe the principle of UV Spectrophotometry.
6. Explain the different columns used in HPLC.
7. Write the difference between chromatography and electrophoresis.
8. What is refractive index ? Explain its significance in food.

(5 × 1 = 5)

**Part B (Short Essay Type Questions)**

*Answer any **five** questions out of the following.  
2 weight each.*

9. What is Iodine value ? Write its significance in oil analysis.
10. Write a brief note about the principle behind Gerber method of fat analysis.
11. Discuss on Lowry's method of protein estimation.
12. Discuss the principle of lane and Eynon method of sugar estimation of foods.
13. What are the quality criteria for the selection of trained panel members ?

**Turn over**





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14. Give an account of indicator organisms and their significance in food safety ?
15. Why toluene distillation method is used for determining moisture in spices.
16. Explain total ash, water soluble ash and acid insoluble ash.

(5 × 2 = 10)

**Part C (Essay Type Questions)**

*Answer any **three** questions out of the following.  
5 weight each.*

17. What is spectroscopy ? Explain with a schematic diagram the working of a Infra-red spectrophotometer.
18. With the help of a neat diagram, explain kjeldahl method of protein estimation.
19. Discuss the principles involved in determination of sugar and starch by chemical test and polarimetry method.
20. Explain briefly about the sensory parameters to judge the quality of food.
21. Explain the principle of chromatographic separators with particular reference of thin layer chromatography.
22. Describe the techniques used for detection of E. Coli in water.

(3 × 5 = 15)

