

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(MID SEMESTER EXAMINATION)**

**CLASS: IMSC  
BRANCH: FOOD TECH.**

**SEMESTER: IV  
SESSION : SP/2019**

**SUBJECT : IMF4005 FOOD ANALYSIS**

**TIME: 1.5 HOURS**

**FULL MARKS: 25**

**INSTRUCTIONS:**

1. The total marks of the questions are 30.
  2. Candidates may attempt for all 30 marks.
  3. In those cases where the marks obtained exceed 25 marks, the excess will be ignored.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. The missing data, if any, may be assumed suitably.
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- Q1 (a) Name different types of Microbial hazards. Differentiate between infection and intoxication of food. [3]  
(b) How an infectious disease reduces the food safety? [2]
- Q2 (a) What are SPS agreements? Discuss eight points in MDG. [3]  
(b) What are four pillars in food security? [2]
- Q3 (a) Differentiate IR and FTIR spectroscopy. [3]  
(b) Mention the different spectral lines for water molecules in IR. [2]
- Q4 (a) Explain the basic principle of Thin Layer Chromatography (TLC). [3]  
(b) What are the applications of UV Visible spectroscopy? [2]
- Q5 (a) What are the properties of Super critical fluid? [3]  
(b) What are the different stationary phase and their separation mechanism in HPLC? [2]
- Q6 (a) Compare GC with LC. [3]  
(b) Discuss the basic principles of AAS. [2]

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