

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Food Tech.) (2014 Onwards)**  
**ADVANCE TECHNIQUES IN FOOD PROCESSING**  
(Sem.-7)  
Subject Code : BTFT-702  
Paper ID : [74749]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt ANY FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt ANY TWO questions.

**SECTION-A**

**Q1 Answer briefly :**

- a) What is food preservation?
- b) What is the principle of ohmic heating?
- c) Define pervaporation.
- d) What are the process conditions of carbon dioxide in supercritical fluid extraction?
- e) Enlist the non-thermal techniques.
- f) What do you understand by extrusion?
- g) Define micro-encapsulation.
- h) Define irradiation.
- i) What do you mean by oscillating magnetic field?
- j) What is active packaging?

### **SECTION-B**

- Q2 What do you understand by dielectric heating? Discuss the working of dielectric heating for food preservation.
- Q3 What is hurdle technology? Explain the importance of hurdle technology in food industry.
- Q4 Define image processing. Discuss the role of image processing in grading process.
- Q5 What do you mean by biodegradable packaging? Explain the functions of food packaging.
- Q6 Write the principle of hydrostatic pressure processing. Describe the direct and indirect compression generation in pressure vessels.

### **SECTION-C**

- Q7 Define nano-filtration. Explain the different membrane based separation techniques in food industries.
- Q8 What do you understand by supercritical fluid extraction? Discuss the process, applications and limitations of supercritical fluid extraction.
- Q9 Define microwave processing. Describe the working principle and applications of microwave processing in food industries.