

Roll No. 

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech. (Food Tech.) (2014 Onwards) (Sem.-7)**  
**ADVANCE TECHNIQUES IN FOOD PROCESSING**

Subject Code : BTFT-702

M.Code : 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) Write down the principle of 'Hurdle Technology'.
- b) Enlist different non-thermal techniques.
- c) Define the term 'Membrane Fouling'.
- d) What do you understand by the term 'Cold Sterilization'?
- e) Write down the principle of microwave processing.
- f) What do you mean by oscillating magnetic field?
- g) Enlist different applications of food irradiation.
- h) What is intelligent packaging?
- i) Enlist different membrane filtration processes along with their pore sizes.
- j) Define the term 'Encapsulation'.

### SECTION-B

- Q2** What do you understand by dielectric heating? Discuss the working along with the principle of dielectric heating for food preservation.
- Q3** Write short note on reverse-osmosis along with a suitable diagram. Also enlist various applications of reverse-osmosis in food sector.
- Q4** Define pervaporation membrane process. Discuss the principle and applications of pervaporation along with a suitable diagram.
- Q5** Write a short note on new researches in the field of food processing and packaging along with suitable examples.
- Q6** Define computerization? Explain the importance of computerization in food industry.

### SECTION-C

- Q7** What is pulsed electric field technology? Discuss in detail the principle and basic components of pulsed electric field system along with a well labelled diagram.
- Q8** Define supercritical fluid extraction. Discuss in detail the principle, design and applications of supercritical fluid extraction in food sector.
- Q9** What is extrusion technology? Discuss in detail the principle and working of twin screw extruder along with its applications.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**