## MASTER OF TECHNOLOGY (CHEMICAL ENGINEERING) (CBCS - 2015 COURSE) M. Tech. (Chemical Engineering) Sem-IV :SUMMER- 2022 SUBJECT : SELF-STUDY PAPER-II:FOOD TECHNOLOGY

Time: 10:00 AM-01:00 PM

Day: Wednesday

S-14552-2022 Date: 15-06-2022 Max. Marks: 60 N.B: 1) All questions are **COMPULSORY**. Figures to the right indicate FULL marks. 2) 3) Answer to both the sections should be written in **SEPARATE** answer book. 4) Assume suitable data, if necessary. **SECTION-I** What is heat transfer? Explain heat transfer by conduction, convection and Q.1 (10)radiation. Also explain thermal death time for food processing. OR **Q.1** Explain in detail principles of food processing. (10)Q.2 Explain in detail thermal processing and heat sterilization of foods with (10)suitable example. OR **Q.2** What is canning of food? How it is done? Explain it with suitable (10)example. Q.3 What is drying? Explain rate of drying curve. (10)Q.3 Explain ultra-high temperature thermal processing of food. (10)**SECTION-II Q.4** What is evaporation? Explain various types of evaporators used for (10)processing of liquid foods. OR **Q.4** What is membrane processing? Explain principle and membrane (10)configurations for processing liquid food. What is frying of food? Explain in detail various types of frying for food. Q.5 (10)OR What is microwave heating of food? Explain in detail with advantages Q.5 (10)and disadvantages of microwave heating. What is extrusion cooking of food? Explain in detail extrusion process for Q.6 (10)food. OR What is food packaging? Explain in detail various objectives and **Q.6** (10)functions of food packaging.