

**PG (NEW) CBCS**  
**M.Sc. Semester-II Examination, 2020**  
**FOOD SCIENCE & NUTRITION**  
**PAPER: FSN 202**

**Full Marks: 20****Time: 1 Hour****Answer any two from the following questions:****10X2=20**

1. (a) Briefly describe the bacterial growth curve with diagram. (b) Bacterial population increases from  $10^3$  cells to  $10^9$  cells in 10 hours. What is the mean growth rate constant (k) and mean doubling time (g)? 5+5
2. Name different types of fungal asexual spores with example. State the life cycle of *Ascomycetes*. 4+6
3. What is Most Probable Number? How do you perform the MPN test in the laboratory? State the effect of salt on microorganisms. 1+6+3
4. Write down the different causes of food spoilage. Briefly describe the intrinsic and extrinsic factors for microbial growth in food material. 3+(3.5+3.5)
5. State the factors affecting the rate of drying. Briefly describe any one drying process. 4+6
6. Define Radappertization and Radicidation. What are the adverse effects of irradiation on food quality? 4+6
7. Differentiate between sterilization and pasteurization. Write down the different methods of pasteurization. State the two general principle employed in food preservation. 2+4+4
8. Write down the different principle of high pressure technology. How does it affect the microbial cell? State its advantages. 3+3+4

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