

科目：食品微生物學

系所組：食品科學系

1. Define foodborne intoxication, infection, and toxicoinfection, and give two examples for each. (10%)
2. Define nonpathogenic and pathogenic *Escherichia coli*. How are the pathogenic strains grouped? What are the characteristics of their toxins and pathogenicities? (15%)
3. List three edible fungi and indicate their applications in functional foods. (10%)
4. What reactions take place in the formation of off-odor compounds from lipid spoilage by microorganisms? (10%)
5. List the factors to be considered in selecting indicators of food safety. (10%)
6. Give three examples to show how the combinations of factors have been used to control growth of *Clostridium botulinum*. (15%)
7. List extrinsic factors necessary for growth of microorganisms in a food. (10%)
8. How does pH affect microbial growth? (10%)
9. Define and explain the following terms. (10%)
 - a. Mycotoxins
 - b. Viruses

※ 注意：1. 考生須在「彌封答案卷」上作答。

2. 本試題紙空白部份可當稿紙使用。

3. 考生於作答時可否使用計算機、法典、字典或其他資料或工具，以簡章之規定為準。