***Question Bank***

**B.Pharm (5th -Sem)**

**Pharmaceutical & food microbiology -IV (BOP-353 )**

**Unit-I**

*Short Question:*

**1**. Difference between prokaryotes & eukaryotes bacteria.

**2.** Draw a structure of bacterial cell.

**3**. Difference between autotrophs & hetrotrophs.

**4**. Define staining.

**5**. Differnce between gram (+) & gram (-) bacteria.

**6**. Classification of bacteria on the basis of size & shape.

**7.** Discuss about bacteria.

**8.** What is negative staining?

*Long Question:*

1. Detail about grams staining techniques.
2. Write a detail about gram staining techniques*.*
3. Classification of bacteria on the basis of ph, temperature, oxygen*.*
4. Discuss the procedure & application of Acid fast staining*.*
5. Write a detail about electron & optical microscope.*.*
6. Write detail about bacterial groth curve.
7. Scope of food and pharmaceutical microbiology.
8. Louis pasteur contribution in microbiology*.*
9. Write detail about bacteriophage*.*

**Unit-II**

*Short Question:*

1*.* Define culture media.

2. Define nosocomial infection.

3. Write the composition of nutrient agar media.

4. Define pure culture.

5.define pasteurization.

*Long Question:*

1. discuss method for cultivation of viruses.
2. Discuss the detail about isolation of bacteria.(explain one method)
3. Explain detail about isolation of virus.
4. Discuss clean & aseptic area.
5. Write a control of contamination during manufacture.
6. Explain streak plate technique in detail*.*

**Unit-III**

*Short Question:*

1. Define the term sterilization & disinfection..

2. Discuss on antiseptic.

3. Write a mode of action of QUATS.

4. Define antimicrobial agents.

5. Dynamics of disinfectants write a suitable example.

*Long Question:*

1. Describe the principle, working, application & advantages of autoclave.
2. Describe the principle, working, application & advantages of hot air oven.
3. Explain detail about factors influencing disinfectants.
4. Detail about evaluation of disinfectants. (Explain phenol coefficient test).
5. Validation of Autoclave.
6. Validation of Hot air oven.
7. Describe the bacteriological filters used to sterilize fluids.
8. Define sterilization. What are different methods of sterilization? Discuss any one method in detail.

**Unit-IV**

*Short Question:*

1. What are probiotics.

2. Define the term food preservation.

3. Define the term antimicrobial preservative.

4. Define food microbiology.

5. Define microbial spoilage of food.

6. Difine cannig.

7. Benefits of probiotic milk.

*Long Question:*

1. Discuss microbial flora of egg, meat, fruits & vegetables.

2. List the several types of microbial food spoilage & name the organisms responsible in each instance

1. List & describe the principles upon which methods of food preservation are based.

**Unit-V**

*Short Question:*

1. Define the term sterility.

2. What is aseptic technique?

3. Write the composition of fluid thioglycollate medium.

4. Define microbial assay.

5. Write the compostion of alternative thioglycollate medium.

*Long Question:*

1. Define the term microbial assay and discuss microbial assay of oxytetracycline.

2. Detail about sterility testing as per I.P.

3. Discuss microbial assays of Vitamins B12**.**

4. Explain detail about microbial assay of erythromycin.