



Faculty: Medicine and Allied Health Sciences		Year/Part: I/I
Program: Pharmacy		Exam Year: 2080, Mangshir (Model Question)
Level: Bachelor	Subject: Pharmaceutical Microbiology and Immunology (BP104)	

GROUP A (Multiple Choice Questions)

[5x1=5]

- i. Answers should be given by filling the Multiple Choice Questions' Answer Sheet.
- ii. Rough can be done in the main answer sheet
- iii. Maximum time of 10 minutes within the total time is given for this group.

1. Which bacteria consists of sterol in cell membrane?
 - a. Mycobacterium
 - b. Mycoplasma
 - c. Escherichia
 - d. Shigella
2. The Iodine used in Gram staining serves as
 - a. Cofactor
 - b. Catalyst
 - c. Chelator
 - d. Mordant
3. The protein coat of viruses that enclose the genetic material is called
 - a. Virion
 - b. Capsid
 - c. Peplomer
 - d. Capsomer
4. Which of the following is the recommended heat temperature and time period for the moist heat sterilization method used in an autoclave?
 - a. 180 degree C for 5 minutes
 - b. 121 degree C for 15 minutes
 - c. 126 degree C for 3 minutes
 - d. 160 degree C for 45 minutes
5. Arrange the sequence for membrane filtration technique correctly.
 - I. Perform biochemical tests to identify the microbes.
 - II. Transfer of membrane filter to culture media.
 - III. Passing of formulations from membrane filter.
 - IV. Incubate the culture media in suitable environment.
 - a. III - I - II - IV
 - b. III - II - IV - I
 - c. II - III - IV - I
 - d. I - III - II - IV

Marks Secured: _____

Code No.

In Words: _____

Examiner's Sign: _____ Date: _____

Scrutinizer's Marks: _____

In Words: _____

Scrutinizer's Sign: _____ Date: _____

Corrected Fill

(A) ● (C) (D)

Incorrect Fill

⊗ (B) ● ⊙

Multiple Choice Questions' Answer Sheet

1. (A) (B) (C) (D)	6. (A) (B) (C) (D)
2. (A) (B) (C) (D)	7. (A) (B) (C) (D)
3. (A) (B) (C) (D)	8. (A) (B) (C) (D)
4. (A) (B) (C) (D)	9. (A) (B) (C) (D)
5. (A) (B) (C) (D)	10. (A) (B) (C) (D)

MANMOHAN TECHNICAL UNIVERSITY
Office of the Controller of Examinations

Budhiganga-4, Morang, Koshi Province, Nepal
Exam Year: 2080, Mangshir

Faculty: Medicine and Allied Health Sciences	Level: Bachelor	Year/Part: I/I
Program: Pharmacy	Time: 1.5 Hours	F.M.: 25
Subject: Pharmaceutical Microbiology and Immunology (BP104)		P.M.: 12.5

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

GROUP A (Multiple Choice Questions and Answer Sheet in separate paper) [5x1=5]

GROUP B (Problem Based Question) [1x6=6]

1. A man developed red rashes in skin, vomiting tendency and troubled breathing. Among many, he remembers intake of shellfish before developing the complications.
 - a. What do you think the pathophysiology he might encounter? [2]
 - b. What can be the symptomatic treatment of the complication? [2]
 - c. What do you suggest him to prevent its repeated episodes in future? [2]

GROUP C (Long Answer Questions - Attempt Any Two) [2x4=8]

2. Explain the principle and steps of Acid-fast staining.
3. Describe viral replication in details.
4. What are the different means of sterilization by utilizing heat to sterilize routine materials used in microbiology laboratories and hospitals?

GROUP D (Short Answer Questions - Attempt Any Three) [3x2=6]

5. What is the importance of fungi in pharmaceutical industries?
6. Describe the structure of bacterial cell wall.
7. Differentiate natural and adaptive immunity.
8. What is an antibody? Explain structure and functions of its types.

☺☺ *The End* ☺☺