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6. Write short notes on any **three** : (3×5=15)

(a) Germ Theory of Disease

(b) Phage therapy

(c) Microbiological technique

(d) Salmonellosis

[This question paper contains 4 printed pages.]

Your Roll No.....,

Sr. No. of Question Paper : 10399

K

Unique Paper Code : 2233520001

Name of the Paper : Microbial World Discipline
Specific Elective

Name of the Course : **B.Sc. (P) Life Sciences**

Semester : VII (NEP-UGCF)

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **FOUR QUESTIONS** in all and Question no. 1 is **COMPULSORY**.

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1. (a) Define : (3)
 - (i) Dysbiosis
 - (ii) Invasion
 - (iii) Zoonosis
- (b) Write the contributions of following : (6)
 - (i) Alexander Flemming
 - (ii) Edward Jenner
 - (iii) Joseph Lister
- (c) What are Opportunistic infections. Give examples. (2)
- (d) Write the causative agent of the following : (2)
 - (i) Avian Influenza
 - (ii) Ebola
- (e) Name the Scientist : (2)
 - (i) Father of Microbiology
 - (ii) Father of Modern Microbiology

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2. (a) Describe the concept of host-pathogen interactions and provide appropriate examples. (6)
 - (b) Explain the terms Virulence, Pathogenicity, carriers, and toxigenicity with examples. (9)
3. (a) What are Prebiotics and Probiotics. Explain their potential role in maintaining human health. (8)
 - (b) Discuss about the composition, location and functions of microflora in immune support, digestion and nutrient synthesis. (9)
4. (a) Explain the pathogens, transmission, symptoms and management of Rabies or COVID-19. (8)
 - (b) Write a note on the contribution of Robert Koch and enlist Koch's Postulates. (7)
5. (a) What is transient microflora. Explain the different transient microbiome of skin, throat, and urogenital tract. (10)
 - (b) Write a detailed note on microbial diversity. (5)

P.T.O.