

**TABLE OF SPECIFICATIONS FOR M.PHIL MLS (Microbiology)**  
**PAPER I**

Paper I includes Basic Bacteriology and Clinical Bacteriology.

S.No:	Topics	MCQ	SEQ
	<b>BASIC BACTERIOLOGY</b>		
1	Bacteria Compared with other Microorganisms	2	1
2	Structure of Bacterial Cells	2	
3	Growth	2	
4	Genetics	2	
5	Classification of Medically Important Bacteria	2	
6	Normal Flora	2	
7	Pathogenesis	4	
8	Host Defenses	2	1
9	Laboratory Diagnosis	2	
10	Antimicrobial Drugs: Mechanism of Action	4	
11	Antimicrobial Drugs: Resistance	3	
12	Bacterial Vaccines	2	
13	Sterilization & Disinfection	3	
	<b>CLINICAL BACTERIOLOGY</b>		
14	Overview of the Major Pathogens & Introduction to Anaerobic Bacteria	2	2
15	Gram-Positive Cocci	8	
16	Gram-Negative Cocci	2	
17	Gram-Positive Rods	2	2
18	Gram-Negative Rods Related to the Enteric Tract	13	
19	Gram-Negative Rods Related to the Respiratory Tract	4	1
20	Gram-Negative Rods Related to Animal Sources (Zoonotic Organisms)	3	
21	Mycobacteria	4	
22	Actinomycetes	2	
23	Mycoplasmas	2	
24	Spirochetes	2	
25	Chlamydiae	1	
26	Rickettsiae	1	
27	Minor Bacterial Pathogens	2	
	Total	80	

For M. Farhan

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## PAPER II

Paper II includes Basic Virology, Clinical Virology, Mycology, Parasitology and Immunology.

<b>BASIC VIROLOGY</b>			
28	Structure	2	1
29	Replication	2	
30	Genetics & Gene Therapy		
31	Classification of Medically Important Viruses		
32	Pathogenesis	1	
33	Host Defenses	1	
34	Laboratory Diagnosis	2	
35	Antiviral Drugs		
36	Viral Vaccines	1	
<b>CLINICAL VIROLOGY</b>			
37	DNA Enveloped Viruses	4	2
38	DNA Nonenveloped Viruses	3	
39	RNA Enveloped Viruses		
40	RNA Nonenveloped Viruses	2	
41	Hepatitis Viruses	4	
42	Arboviruses	2	
43	Tumor Viruses		
44	Slow Viruses & Prions		
45	Human Immunodeficiency Viruses	2	
46	Minor Viral Pathogens		
<b>MYCOLOGY</b>			
47	Basic Mycology	2	1
48	Cutaneous & Subcutaneous Mycoses	3	
49	Systemic Mycoses	2	
50	Opportunistic Mycoses	3	
<b>PARASITOLOGY</b>			
51	Intestinal & Urogenital Protozoa	8	2
52	Blood & Tissue Protozoa	4	
53	Minor Protozoan Pathogens		
54	Cestodes	2	
55	Trematodes	1	
56	Nematodes	5	
<b>IMMUNOLOGY</b>			
57	Immunity	2	1
58	Cellular Basis of the Immune Response	2	

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59	Antibodies	3	
60	Humoral Immunity	2	
61	Cell-Mediated Immunity	3	
62	Major Histocompatibility Complex & Transplantation		
63	Complement	2	
64	Antigen-Antibody Reactions in the Laboratory	6	
65	Hypersensitivity (Allergy)	2	
66	Tolerance & Autoimmune Disease		
67	Tumor Immunity		
68	Immunodeficiency	2	
	<b>TOTAL</b>	<b>80</b>	<b>07</b>

Paper I and Paper II will have 1 LEQ each.

**NOTE:**

1. MCQs carry one mark.
2. Each SEQ carry 10 marks.
3. MCQs' portion will take 95 minutes.
4. SEQs' portion will take 85 minutes.

*For*  
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