



**M-4009**  
**Second M. B. B. S. Examination**  
**June / July - 2015**  
**Microbiology : Paper - I**

Time : Hours]

[Total Marks : 40

**Instructions :**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. : □ □ □ □ □ □
Name of the Examination : SECOND M. B. B. S.	Student's Signature
Name of the Subject : MICROBIOLOGY : PAPER - I	
Subject Code No. : 4 0 0 9 Section No. (1, 2,.....) : Nil	

- (2) Figures to the right indicate full marks of the question.  
(3) Draw neat labelled diagrams wherever necessary.

- 1 Discuss in detail : (any two) 8
- (a) Enumerate the different methods of performing Antibiotic susceptibility Testing. Describe any one.
- (b) Explain the principle of working of an Autoclave. Write a note on Sterilization control of an Autoclave.
- (c) Enumerate the different methods of gene transfer. Explain any one.
- 2 Write notes on : (any three) 12
- (a) Herd Immunity.
- (b) Type I Hypersensitivity reaction
- (c) Secondary Immune Deficiency diseases.
- (d) Biological effects of complement.

- 3 Write notes on : (any two) 8
- (a) Bacterial capsule
  - (b) Major Histocompatibility complex class I
  - (c) *Cysticercus cellulosae*
- 4 Write in short : (any three) 12
- (a) Pathogenicity and laboratory diagnosis of *Naegleria fowleri*.
  - (b) Life cycle of *Plasmodium falciparum* in Humans and Mosquitoes. Add a note on Methods of transmissions of Malaria.
  - (c) Enumerate the different modes of transmission of human Toxoplasmosis. Explain the laboratory diagnosis of Toxoplasmosis.
  - (d) Describe the course and termination of Amoebic liver abscess.

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M-4010

Second M. B. B. S. Examination

June / July - 2015

Microbiology : Paper - II

Time : Hours]

[Total Marks : 40

Instructions :

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવકી પર અવશ્ય લખવી.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :

Name of the Subject :

Subject Code No. :     Section No. (1, 2,.....) :

Seat No. :

Student's Signature

- (2) Figures to the **right** indicate full marks of the question.  
 (3) Draw neat labelled diagrams wherever **necessary**.

- 1 Write notes on : (any two) 8
- (a) Enumerate microorganisms causing Urinary Tract Infection. Describe the laboratory diagnosis of any one bacterial agent.  
 (b) Enumerate the microorganisms causing Gas Gangrene. Describe the laboratory diagnosis of any one.  
 (c) Classify Non Tuberculous Mycobacteria and describe its pathogenesis.

- 2 Write notes on : (any three) 12
- (a) Toxic Shock Syndrome Toxin  
 (b) Name the biotypes of V. Cholerae 01. Write a note on Cholera Toxin.  
 (c) Lab. Diagnosis of Helicobacter pylori infection  
 (d) Corynebacterium ulcerans.

3 Write notes on : (any two) 8

- (a) Tinea Capitis
- (b) Clinical manifestations caused by Candida. Add a note on laboratory diagnosis of Candida
- (c) Opportunistic Fungal Infections.

4 Write notes on : (any three) 12

- (a) Serological Markers of Hepatitis B infection
- (b) Viral Inclusion Bodies
- (c) Classical Dengue Fever
- (d) Laboratory diagnosis of HIV infection.



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**M-4009-N**  
**Second M. B. B. S. Examination**  
**December - 2015**  
**Microbiology : Paper - I**

Time : Hours]

[Total Marks :40

**Instructions :**

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉતારવહી પર અવશ્ય લખવી. Fill up strictly the details of signs on your answer book.	Seat No. : <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>							
Name of the Examination : SECOND M. B. B. S.	<table border="1"><tr><td colspan="2">Student's Signature</td></tr></table>	Student's Signature						
Student's Signature								
Name of the Subject : MICROBIOLOGY : PAPER - I								
Subject Code No. : 4 0 0 9 Section No. (1, 2,.....): Nil								

1. Discuss in detail (any two)

(08)

- Describe the structure of a bacterial cell wall and its significance in antimicrobial resistance.
- Enlist mechanism of gene transfer in bacteria. Describe in detail the one resulting in transferable drug resistance.
- Define sterilization. Describe the working principle, control and application of gas sterilization.

2. Write short notes (Any Three)

(12)

- Mechanisms of innate immunity.
- Delayed hypersensitivity reaction.
- Structure and function of IgG
- Enlist four important characteristics of antigen antibody reaction. Describe zone phenomenon and its effect of test results.

3. Write notes on: (any two) (08)
- (a) Immunological tolerance.
  - (b) Spauldings classification for Medical Devices and Levels of Disinfection.
  - (c) Autoinfection.
4. Write in short (Any Three) (12)
- (a) Pathogenesis and laboratory diagnosis of malignant malaria
  - (b) Describe life cycle and pathogenesis of W bancrofti.
  - (c) Stool concentration techniques.
  - (d) Congenital toxoplasmosis- pathogenesis and laboratory diagnosis.



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**M-4010-N**  
**Second Year M. B. B. S. Examination**  
**December - 2015**  
**Microbiology : Paper - II**

Time : Hours]

[Total Marks :

Instructions :

નીચે દર્શાવેલ નિશાનોવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. : □ □ □ □ □ □
Name of the Examination : SECOND YEAR M. B. B. S.	Student's Signature
Name of the Subject : MICROBIOLOGY : PAPER - II	
Subject Code No. : 4 0 1 0 Section No. (1, 2,.....) : Nil	

1. Discuss in detail (any two) (08)
  - a) Describe morphology clinical features & laboratory diagnosis of acute gonorrhoea.
  - b) Describe morphology and diagnosis of leptospira.
  - c) Laboratory diagnosis of Brucellosis.
2. write short notes (any three) (12)
  - a) Reiter's syndrome.
  - b) Pathogenicity of Escherichia coli
  - c) Probiotics
  - d) Toxin & enzymes produced by streptococcus pyogenes.
3. write notes (any two) (08)
  - a) Enlist the opportunistic Mycoses, Describe Morphology & laboratory diagnosis of Cryptococcus neoformans.
  - b) Mycotoxins.
  - c) Classification of Fungi.

4 write short notes (any three)

(12)

- a) Name the arboviruses prevalent in India & Discuss in detail about pathogenesis & laboratory diagnosis of Dengue viral infection.
- b) Replication of HIV virus.
- c) Classify viruses & write about commonly used viral vaccine.
- d) Describe antigenic structure & laboratory diagnosis of H1 N1 influenza.