

March-1990

155

M.D. DEGREE EXAMINATION, MARCH 1990

Branch IV — Microbiology

GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours

Answer ALL the questions.

1. Describe bacterial variations and discuss in detail genetic variation in bacteria.
 2. Discuss the role of complement in disease and health.
 3. Write briefly on :
 - (a) Flagella.
 - (b) T. lymphocyte.
 - (c) Pasteurisation.
 - (d) Bacteriocins.
 - (e) L. forms.
 - (f) Dark ground microscope.
-

M.D. DEGREE EXAMINATION, OCTOBER 1990

Branch IV — Microbiology

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours

Answer ALL the questions.

1. Compare and contrast colicinogeny and lysogeny.
 2. Discuss the role of T. lymphocytes and B. lymphocytes in immune response.
 3. Write briefly on :
 - (a) Bacterial spore.
 - (b) Monoclonal antibodies.
 - (c) Tyndallisation.
 - (d) Plasmids.
 - (e) Staining procedures to demonstrate bacterial capsule.
 - (f) Exotoxins.
-

M.D. DEGREE EXAMINATION, MARCH 1991.

Branch IV — Microbiology

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours.

Answer ALL the questions.

1. Discuss the advances in immunology and its role in the diagnosis and treatment of various diseases.
 2. Describe the mechanism of gene transfer among bacteria and its significance.
 3. Write short notes on :
 - (a) Adjuvant.
 - (b) Bacterial virulence.
 - (c) Phase contrast microscope.
 - (d) Tumour antigens.
 - (e) Complement cascade.
-

September-1991

259

M.D. DEGREE EXAMINATION, SEPTEMBER 1991

Branch IV — Microbiology

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours.

Maximum : 100 marks.

Answer ALL questions.

1. Discuss critically about Autoimmune diseases.
(25 marks)
 2. Compare and contrast the sterilization methods by moist heat and dry heat.
(25 marks)
 3. Write briefly on :
 - (a) Twort and d'Herelle.
 - (b) Bacterial flagella.
 - (c) Chemical sterilizing agents.
 - (d) Baterial conjugation.
 - (e) Endotoxins.

(5 × 10 = 50 marks)
-

March-1992

[259]

M. D. DEGREE EXAMINATION, MARCH 1992.

Microbiology

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours. Maximum : 100 marks.

Answer ALL the questions.

1. Discuss critically Immunology of Transplantation.
(25 marks)

 2. Discuss critically mechanisms of drug resistance in Bacteria and its role in humane infections. (25 marks)

 3. Write briefly on :
 - (a) Ionising radiations
 - (b) Gerald Edelman
 - (c) Bacterial fimbriae
 - (d) Immunoelectrophoresis
 - (e) Complement. (5 × 10 = 50 marks)
-

M.D. DEGREE EXAMINATION SEPTEMBER, 1992

Branch IV - Microbiology

Paper I - GENERAL MICROBIOLOGY AND
IMMUNOLOGY

Time: Three hours Maximum: 100 marks

Answer ALL questions

1. Define 'Immunoassays', classify immunoassays and describe in detail 'ELISA'. (25 marks)
2. What is 'Bacterial transformation'? Describe its mechanism and its applications in Microbiology and Biotechnology. (25 marks)

3. Write short notes on:

- (a) Sterilisation indicators
- (b) Antibiotic policy
- (c) Fermentors
- (d) Plasmids
- (e) PCR

(5x10=50 marks)

November-1993

[P R 3 5 9]

M.D. DEGREE EXAMINATION.

Branch IV — Microbiology

(Old/New Regulations)

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours.

Maximum : 100 marks.

Answer ALL questions.

1. Describe the structure of bacterial cell wall highlighting the difference between Gram-positive and negative bacteria. (25)
 2. Explain the basis of diversity of antibodies and their genetic control. (25)
 3. Write briefly on :
 - (a) Restriction fragment length polymorphism.
 - (b) Synchronous growth.
 - (c) T-helper cell functions.
 - (d) MHC restriction.
 - (e) Immunosuppression. (5 × 10 = 50)
-

April-1994

[VM1059]

M.D. DEGREE EXAMINATION.

Branch IV — Microbiology

(Old/New Regulations)

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours .

Maximum : 100 marks

Answer ALL questions.

1. Describe the mechanisms of action of antimicrobial agents with examples. Discuss the quality control measures for susceptibility tests based on disc diffusion.
(25)
2. Discuss the pathogenesis and diagnosis of auto-immune diseases in man.
(25)
3. Write briefly on :
 - (a) Tumour necrosis factor.
 - (b) Hybridoma.
 - (c) Requirements for bacterial growth.
 - (d) Prions.
 - (e) Antibody dependent cell mediated cytotoxicity.
(5 × 10 = 50)

April-1995

[SR 159]

M.D. DEGREE EXAMINATION.

Branch IV -- Microbiology

(Old/New Regulations)

**Paper I -- GENERAL MICROBIOLOGY AND
IMMUNOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Describe methods of sterilization currently in vogue in our hospitals and suggest improvements to face the threat of hospital acquired infections especially AIDS. (25)
2. Describe cell mediated immune responses and the assays to measure them. (25)
3. Write short notes on : (5 x 10 = 50)
 - (a) Nucleic acid probes.
 - (b) Heat shock proteins.
 - (c) Lysogenic conversion.
 - (d) M.H.C. restriction.
 - (e) Limulus lysate test.

[AK 118]

M.D. DEGREE EXAMINATION.

Branch IV — Microbiology

(Old/New/Revised Regulations)

Paper I — GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the role of complement in human diseases. What are the clinical clues that should lead you to suspect a complement deficiency state? (25)
 2. Discuss the cause and mechanism of drug resistance. Give your proposals for the improvement of antibiotic use. (25)
 3. Write a short note on : (50)
 - (a) Disposal of infectious waste. .
 - (b) Chemosterilants.
 - (c) Mononuclear phagocytes.
 - (d) Clinical applications of polymerase chain reaction.
 - (e) Bactec System.
-

October-1996

PK 118

M.D. DEGREE EXAMINATION

Branch IV - Microbiology

(Old/New Regulations)

Paper I - GENERAL MICROBIOLOGY AND
IMMUNOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Give an account of the principle and application of fluorescent antibody techniques. (25)
2. Discuss the immunology of organ transplantation. (25)
3. Write briefly on:
 - (a) Sterilization by radiation
 - (b) Bacterial cell wall
 - (c) Interleukins
 - (d) Quality control in microbiology lab
 - (e) Koch's phenomenon.

(5x10=50)

April-1997

MP 118

M.D. DEGREE EXAMINATION
Branch IV - Microbiology
(New/Revised Regulations)

Paper I - GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time: Three hours

Max. marks:100

Answer All Questions

1. Discuss the methods of cultivation of anaerobic bacteria and their identification. Briefly mention their role in causation of disease. (25)
2. Give an account of auto immunity. Briefly outline the methods for the diagnosis of auto immune disorders of blood. (25)
3. Write briefly on:
 - (a) Chemical disinfection
 - (b) Mutation
 - (c) Bacterial antigens
 - (d) Major Histocompatibility Complex
 - (e) Louis Pasteur.

(5x10=50)

October-1997

MS 117

M.D. DEGREE EXAMINATION

Branch IV - Microbiology

(New/ Revised Regulations)

Paper I - GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss hospital infection. (25)
2. Discuss cell-mediated immunity. (25)
3. Write briefly on:
 - (a) Plasmids
 - (b) Universal precautions
 - (c) Recombinant DNA technology
 - (d) Bacterial cell wall
 - (e) Antigens.

(5x10=50)

April-1998

SV 118

M.D. DEGREE EXAMINATION
Branch IV - Microbiology
(New/Revised Regulations)

Paper I - GENERAL MICROBIOLOGY AND IMMUNOLOGY

Time: Three hours

Max.marks:100

Answer All Questions

1. Discuss the different mechanisms of gene transfer in bacteria. (25)
2. Write in detail on the major histocompatibility antigens of man. (25)
3. Write briefly on:
 - (a) Methods of classifying bacteria
 - (b) Labelled antibody tests
 - (c) Immune complex diseases
 - (d) Sterilisation indicators
 - (e) Cell wall of bacteria.

(5x10=50)

October-1998

[SM 118]

M.D. DEGREE EXAMINATION.

Branch IV — Microbiology

(New/Revised Regulations)

Paper I — GENERAL MICROBIOLOGY AND
IMMUNOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the properties, types and the importance of extrachromosomal genetic materials in bacteria. (25)
 2. Describe the mechanism of transplant rejection and the methods of tissue typing and matching. Add a note on the prevention of graft rejection.
 3. Write briefly on :
 - (a) Electron microscopy
 - (b) Functional subpopulations of T-cells
 - (c) Toxins of bacteria
 - (d) Immunodiffusion tests
 - (e) Immunoglobulin G.
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April-1999

[SG 118]

Sub. Code : 2017

M.D. DEGREE EXAMINATION

Branch IV - Microbiology

(New/Revised Regulations)

Paper I — GENERAL MICROBIOLOGY AND
IMMUNOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the use of hypochlorite and phenolic disinfectants in hospital. (25)
 2. Discuss the molecular methods for the clinical Microbiology laboratory. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Graft versus host reactions
 - (b) Wall defective microbial flora
 - (c) E. Test
 - (d) Heterophile antibodies
 - (e) Antigen presenting cell.
-

October-1999

KA 118]

Sub. Code : 2017

M.D. DEGREE EXAMINATION.

(New/Revised Regulations)

Branch IV — Microbiology

**Paper I — GENERAL MICROBIOLOGY AND
IMMUNOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Outline anatomy of Bacterial cell indicating the sites of action of various antimicrobial agents. (25)
 2. Give an account of Interleukins highlighting their therapeutic uses. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Phase contrast Microscopy.
 - (b) Exotoxin
 - (c) Louis Pasteur
 - (d) Quality control for Autoclave method of sterilisation
 - (e) Interferon.
-

April-2000

[KB 118]

Sub. Code : 2015

M.D. DEGREE EXAMINATION

(Old/New/Revised Regulations)

Branch IV — Microbiology

**Paper I — GENERAL MICROBIOLOGY AND
IMMUNOLOGY**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

1. Discuss the mode of action of antibiotics and mechanism of development of antimicrobial drug resistance. (25)
 2. Discuss the mechanism of Autoimmunity and its role in human diseases. (25)
 3. Write briefly on : (10 × 5 = 50)
 - (a) Bacterial adherence
 - (b) Transposones
 - (c) Monoclonal Antibodies
 - (d) Arthus Phenomena
 - (e) Interleukins.
-

October-2000

[KC 118]

Sub. Code : 2015

M.D. DEGREE EXAMINATION.

Branch IV — Microbiology

(Old/New/Revised Regulations)

Paper I — GENERAL MICROBIOLOGY AND
IMMUNOLOGY

Time : Three hours .) Maximum : 100 marks

Answer ALL questions.

1. Describe the bacterial metabolism. (25)
 2. Discuss the development of B lymphocytes. (25)
 3. Write briefly on : (5 × 10 = 50)
 - (a) Hot air oven
 - (b) Koch's postulates
 - (c) Electron microscopy
 - (d) Major Histocompatibility complex
 - (e) Pathways of complement activation.
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