

CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION - OCTOBER 2012

MICROBIOLOGY

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

- I. Answer any **TEN** of the following: 2x10=20
- a) Toxic Shock Syndrome
 - b) Antigen
 - c) Monoclonal Antibodies
 - d) Coagulase Test
 - e) Immune Response
 - f) Hypersensitivity
 - g) Typhoid
 - h) Atopy
 - i) Widal Test
 - j) Adjuvants
 - k) Tube Precipitation Test
 - l) Innate Immunity

PART-B

UNIT-I

- Answer any **TWO** complete questions of the following: 10x2=20
- II. a) Explain the mechanism of Cell Mediated Immune Response. 06
b) Write a note on theories of immune response. 04
 - III. a) Give an account of the classification of Immunity. 06
b) Write a note on the factors determining immunogenicity of antigens. 04
 - IV. a) Explain the basic structure of immunoglobulins with a neat labelled diagram. 06
b) Write a note on IgM. 04

UNIT-II

- Answer any **TWO** complete questions of the following: 10x2=20
- V. a) Classify hypersensitivity reactions. Add a note on anaphylaxis. 06
b) Write a note on agglutination reactions. 04
 - VI. a) Explain the Hybridoma Technique for production of Monoclonal Antibodies. 06
b) Write a note on measurement of antigen and antibody. 04
 - VII. a) Explain the different types of Vaccines. 06
b) Write a note on ELISA. 04

UNIT-III

- Answer any **TWO** complete questions of the following: 10x2=20
- VIII. a) Explain the characteristics, pathogenesis and laboratory diagnosis of *Staphylococcus* 06
b) Write a note on laboratory diagnosis and treatment of HIV. 04
 - IX. a) Explain the pathogenesis and treatment of *Plasmodium vivax*. 06
b) Write a note on morphology of *Balantidium coli*. 04

- X. a) Explain the pathogenesis and laboratory diagnosis of *Candida*. 06
 b) Write a note on Cholera 04

MIC 501

Reg. No.

CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION - OCTOBER 2013

MICROBIOLOGY

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

- I. Answer any TEN of the following: 2x10=20**
- m) Streptolysin-S
 - n) Antigen
 - o) Cholera
 - p) Natural Immunity
 - q) Hybridoma
 - r) ELISA
 - s) Hepatitis A
 - t) Atopy
 - u) Immunoglobulins
 - v) Tetanus
 - w) Ring Test
 - x) T-Cells

PART-B

UNIT-I

Answer any TWO complete questions of the following: 10x2=20

- II. a) Explain the mechanisms of Innate Immunity. 06
 b) Write a note on factors determining the immunogenicity of antigens. 04
- III. a) Explain the general properties of Immunoglobulin G and Immunoglobulin M. 06
 c) Write a note on types of antigens. 04
- IV. a) Explain the mechanism of humoral immune response. 06
 b) Write a note on theories of immune response. 04

UNIT-II

Answer any TWO complete questions of the following: 10x2=20

- V. a) Classify hypersensitivity reactions. Add a note on the mechanism of Type I Hypersensitivity. 06
 b) Define vaccine. List types of vaccines. 04
- VI. a) Explain the various types of precipitation reactions. Add a note on their applications. 06
 b) Write a note on the applications of monoclonal antibodies. 04
- VII. a) Explain the hybridoma technique for production of monoclonal antibodies. 06
 c) Write a note on measurement of antigen and antibody reactions. 04

UNIT-III

Answer any TWO complete questions of the following: 10x2=20

- VIII. a) Explain the pathogenesis of *Candida albicans*. 06
 c) Write a note on Shigellosis. 04
- IX. a) Explain the pathogenesis of *Staphylococcus* 06

- b) Write a note on *Tetanus*. 04
- X. a) Explain the pathogenic characters and treatment of *Giardia intestinalis*. 06
- b) Write a note on Structure of HIV. 04

MIC 501

Reg. No.

CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION - OCTOBER 2014

MICROBIOLOGY

IMMUNOLOGY AND MEDICAL MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

I. Answer any TEN of the following: 2x10=20

- y) Immune Response
- z) Serology
- aa) Tetanus
- bb) Antibodies
- cc) Phage Typing
- dd) Adjuvant
- ee) AIDS
- ff) ELISA
- gg) Exotoxins
- hh) I_gE
- ii) Hybridoma
- jj) Slide Test

PART-B

UNIT-I

Answer any TWO complete questions of the following: 10x2=20

- II. a) Discuss the general properties of Immunoglobulins. 06
- b) Write a note on Acquired Immunity. 04
- III. a) Explain the non-immune mechanism of Innate Immunity. 06
- d) Write a note on theories of Immune Response. 04
- IV. a) Define Immunity. Explain its classification. 06
- b) Write a note on factors affecting Immune Response. 04

UNIT-II

Answer any TWO complete questions of the following: 10x2=20

- V. a) Explain the mechanism and applications of agglutination reactions. 06
- b) Write a note on vaccine preparation. 04
- VI. a) Explain the mechanism of Type I Hypersensitivity Reaction. 06
- b) Write a note on general features of Antigen Antibody Reactions. 04
- VII. a) Explain the types and mechanism of precipitation reactions. 06
- d) Write a note on applications of Monoclonal Antibodies. 04

UNIT-III

Answer any TWO complete questions of the following: 10x2=20

- VIII. a) Explain the Pathogenicity and treatment of *Candida*. 06
d) Write a note on *Escherichia Coli*. 04
- IX. a) Explain the Pathogenicity, Lab Diagnosis and Treatment of *Streptococcus sps.* 06
b) Write a note on *Hepatitis*. 04
- X. a) Explain the Pathogenicity, Lab Diagnosis and Treatment of *Giardia*. 06
b) Write a note on *Salmonella*. 04
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MIC 501

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CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION - OCTOBER 2015

MICROBIOLOGY

PAPER V – IMMUNOLOGY AND MEDICAL MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

- I. Answer any TEN of the following: 2x10=20**
- kk) Antibody
 - ll) Sporozoite
 - mm) Monoclonal Antibodies
 - nn) Oral Thrush
 - oo) Adjuvant
 - pp) Serology
 - qq) Immune Response
 - rr) Enterotoxin
 - ss) Coombs Test
 - tt) B-Cells
 - uu) HIV
 - vv) Anaphylaxis

PART-B

UNIT-I

Answer any TWO complete questions of the following: 10x2=20

- II. a) Explain the mechanism of humoral mediated immune response. 06
b) Write a note on Factors determining the Immunogenicity of Antigens. 04
- III. a) Explain the basic structure of Immunoglobulin, with a neat labeled diagram. 06
e) Write a note on classification of antigens. 04
- IV. a) Define immunity. Give an account of the classification of immunity. 06
b) Write a note on the Immunoglobulin A. 04

UNIT-II

Answer any TWO complete questions of the following: 10x2=20

- V. a) Explain the types of Agglutination Reactions. Add a note on the applications. 06
b) Write the classification of hypersensitivity reactions. 04
- VI. a) List the different types of vaccines and explain the methods of vaccine preparation. 06
b) Write a note on applications of monoclonal antibodies. 04

- VII. a) Explain the general features of Antigen-Antibody Reactions. Add a note on the measurement of Antigen and Antibody. 06
e) Write a note on ELISA for the detection of Antigens. 04

UNIT-III

Answer any TWO complete questions of the following: 10x2=20

- VIII. a) Explain the Pathogenesis and treatment of *Escherichia coli*. 06
e) Write a note on *Hepatitis B*. 04
- IX. a) Explain the Pathogenesis, Lab Diagnosis and treatment of *Trichomonas*. 06
b) Write a note on *Streptolysins*. 04
- X. a) Explain the Pathogenicity, Lab Diagnosis and Treatment of *Aspergillus*. 06
b) Write a brief note on *Cholera*. 04

CREDIT BASED FIFTH SEMESTER B.Sc. DEGREE EXAMINATION – APRIL 2016

MICROBIOLOGY**IMMUNOLOGY AND MEDICAL MICROBIOLOGY**

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

- I. Answer any **TEN** of the following: 2x10=20
- a) Expand EPEC
 - b) Immunoglobulins
 - c) Epitope
 - d) Exotoxins
 - e) Adjuvant
 - f) Monoclonal Antibodies
 - g) Traveller's Diarrhoea
 - h) Immunity
 - i) Serology
 - j) IMViC
 - k) Atopy
 - l) ELISA Test

PART-B**UNIT-I**Answer any **TWO** complete questions of the following: 10x2=20

- II. a) Define and classify antigens. Add a note on the factors determining Immunogenicity of antigens. 06
- b) Write a note on I_gG 04
- III. a) Explain the mechanism of Humoral Immune response. 06
- b) Write a note on Acquired Immunity. 04
- IV. a) Explain the basic structure of Immunoglobulins with a neat labelled diagram. 06
- b) Write a note on factors affecting Immune response. 04

UNIT-IIAnswer any **TWO** complete questions of the following: 10x2=20

- V. a) Explain the general features of antigen antibody reactions. 06
- b) Write a note on applications of Monoclonal antibodies. 04
- VI. a) Explain the mechanism of precipitation reaction. Add a note on its applications. 06
- b) Write a note on different types of vaccines. 04
- VII. a) Define and classify hypersensitivity reactions. Add a note in delayed type of hypersensitivity reaction. 06
- b) Add a note on Agglutination reaction. 04

UNIT-IIIAnswer any **TWO** complete questions of the following: 10x2=20

- VIII. a) Classify *Streptococci*. Add a note on its laboratory diagnosis and treatment. 06
- b) Briefly explain the laboratory diagnosis of *Shigella* 04
- IX. a) Explain the Morphology and life cycle of *Entamoeba histolytica*. 06
- b) Write a note on laboratory diagnosis and treatment of *Salmonella*. 04
- X. a) Briefly describe the Morphology and pathogenicity of *Vibrio cholerae*. 06
- b) Write a note on pigments produced by *Pseudomonas*. 04
