[LK 540] FEBRUARY 2017 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Classify streptococci. Describe in detail the epidemiology, pathogenesis, diagnosis and management of rheumatic fever.

II. Write notes on: **(4 x 5 = 20)**

1. CD 8+ T cells.
2. High level disinfection in hospitals.
3. Virulence determinants of bacteria.
4. IgM detection in infectious diseases.

III. Short answers on: **(5 x 2 = 10)**

1. Metchnikoff.
2. Western blot.
3. Synergism.
4. Laboratory diagnosis of primary syphilis.
5. Botulism.

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[LL 540] AUGUST 2017 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Classify sterilisation process. Describe the principle, mechanism and uses of autoclave.

II. Write notes on: **(4 x 5 = 20)**

1. Chocolate agar.
2. Passive immunity.
3. Laboratory diagnosis of leptospirosis.
4. Gonococci.

III. Short answers on: **(5 x 2 = 10)**

1. Name two bacteria with capsule.
2. Graft versus host reaction.
3. Louis Pasteur.
4. Mention four toxins of streptococcus pyogenes.
5. Name four zoonotic disease caused by bacteria.

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[LM 540] FEBRUARY 2018 **Sub Code: 5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Enumerate the methods of gene transfer and discuss the mechanisms of drug resistance in bacteria.

II. Write notes on: **(6 x 4 = 24)**

1. Recombinant DNA technology in vaccine production.
2. Auto immunity.
3. Enterococci.
4. Exotoxins.
5. Gaseous sterilization.
6. Bordetella pertussis.

III. Short answers on: **(6 x 1 = 6)**

1. MALT.
2. Clostridium difficile.
3. Satellitism.
4. Widal test.
5. Chancre.
6. BCG.

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[LN 540] AUGUST 2018 **Sub Code: 5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Classify anaerobes. Describe the aetiology, pathogenesis, lab diagnosis and prophylaxis of tetanus.

II. Write notes on: **(6 x 4 = 24)**

1. Mutations.
2. Complement deficiency diseases.
3. HLA typing.
4. Enterohemorrhagic escherichia coli.
5. Lab diagnosis of cholera.
6. Heat sterilization.

III. Short answers on: **(6 x 1 = 6)**

1. Affinity and avidity.
2. Name any two enriched culture media.
3. Name the animal models used for cultivation of mycobacterium leprae.
4. C – reactive protein.
5. Commensals.
6. Non-venereal treponemes.

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[LO 540] FEBRUARY 2019 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1+1+2+3+2+1 = 10)**

1. A 15 year old boy presents with history of fever with headache, malaise and coated tongue of 8 days duration. On examinations boy was found to have step ladder pyrexia, bradycardia and soft palpable spleen. What is the probable diagnosis? Write the mode of infection, pathogenesis, lab diagnosis and treatment. Add a note on its prophylaxis.

II. Write notes on: **(6 x 4 = 24)**

1. Toxins of streptococcus pyogenes.
2. Immunoglobulin G. (IgG).
3. Botulism.
4. Lymphogranuloma venereum.
5. Tuberculin testing.
6. Actinomycosis.

III. Short answers on: **(6 x 1 = 6)**

1. Transposons.
2. Cold sterilization.
3. Composite media.
4. El Tor vibrios.
5. White graft response.
6. Enumerate four complement deficiency diseases.

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[LP 540] AUGUST 2019 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 + 2 + 1 + 3 + 2 + 1 = 10)**

1. A 25 year old female admitted with history of watery diarrhoea resembling rice water of 24 hrs duration along with copious vomiting. What is your diagnosis? Write the pathogenesis, sample collections, lab diagnosis and treatment of the above clinical condition. Add a note prophylaxis.

II. Write notes on: **(6 x 4 = 24)**

1. Toxic shock syndrome.
2. Immunoglobulin M. (IgM).
3. Gas gangrene.
4. PCR.
5. Soft sore.
6. Pasteurization.

III. Short answers on: **(6 x 1 = 6)**

1. Enumerate Koch’s postulates.
2. Dark ground microscopy.
3. Enumerate the primary mediators of anaphylaxis.
4. HLA.
5. Causative agent of actinomycosis.
6. Coombs test.

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[LQ 540] FEBRUARY 2020 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(2 + 3 + 3 + 2 = 10)**

1. Classify Rickettsia. Write in detail about pathogenesis and lab diagnosis of typhus fever and write about Brill Zinsser disease.

II. Write notes on: **(6 x 4 = 24)**

1. Radiation sterilization and gas sterilization.
2. Identification of bacteria.
3. Pseudomonas infections.
4. Bacillus anthrax.
5. ELISA.
6. Mycetoma.

III. Short answers on: **(6 x 1 = 6)**

1. Flourescent microscopy.
2. Plasmids.
3. Indirect Coombs test.
4. Significant bacteriuria.
5. Vincents angina.
6. X D R tuberculosis.

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[LR 540] NOVEMBER 2020 **Sub.Code :5063**

(AUGUST 2020 SESSION)

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(2 + 5 + 3 = 10)**

1. Define Culture Media, write in detail about, different types of Culture Media. Add a note on Anaerobic Culture Methods.

II. Write notes on: **(6 x 4 = 24)**

1. Mechanisms of Drug resistance.
2. Natural Killer cells.
3. Immunoglobulin G.
4. Modified AFB and uses.
5. Flagellar stain.
6. Eschericia coli- virulence factors.

III. Short answers on: **(6 x 1 = 6)**

1. Louis Pastuer.
2. Growth curve.
3. Ponder’s stain.
4. Slime layer.
5. Serotyping of vibrio cholerae.
6. Bacteriocins.

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[MBBS 0921] SEPTEMBER 2021 **Sub.Code :5063**

(FEBRUARY 2021 SESSION)

M.B.B.S. DEGREE EXAMINATION
SECOND YEAR
PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Define Hypersensitivity. What are the types of hypersensitivity? Write in detail about Type I Hypersensitivity.

II. Write notes on: **(6 x 4 = 24)**

1. Flagella.
2. Malignant pustule.
3. Laboratory diagnosis of Vibrio Cholera.
4. Anaerobic culture methods.
5. Tumor antigens.
6. Atypical mycobacteria.

III. Short answers on: **(6 x 1 = 6)**

1. Adjuvants.
2. Indole Test.
3. Louis Pasteur.
4. Satellitism.
5. El Tor Vibrios.
6. Milk ring Test.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0222] FEBRUARY 2022 **Sub.Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted from the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Classify streptococci, Describe in detail the epidemiology, Pathogenesis, Diagnosis and management of Rheumatic fever.

II. Write notes on: **(6 x 4 = 24)**

1. Monoclonal Antibodies.
2. Immunoglobulin M (Ig M).
3. Heat sterilization.
4. Laboratory Diagnosis of Leptospirosis.
5. Plague.
6. Elek's gel precipitation Test.

III. Short answers on: **(6 x 1 = 6)**

1. Enriched Media.
2. BCG.
3. Robert Koch.
4. Negative stains.
5. Naglers Reaction.
6. Listeria Monocytogenes.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0822] **AUGUST 2022** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Describe in detail about the morphology, Pathogenesis, Lab diagnosis and treatment of Cholera.

II. Write notes on: **(6 x 4 = 24)**

1. Erythroblastosis foetalis.
2. Gaseous Sterilizaion.
3. Differential media.
4. Lab diagnosis of Syphilis.
5. Major histocompatability complex.
6. Gene therapy.

III. Short answers on: **(6 x 1 = 6)**

1. Culture media for Tuberculosis.
2. Pigment produced by Pseudomonas.
3. Tetanus toxoid.
4. Jobs Syndrome.
5. Differential stains.
6. Transport media.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0223] **FEBRUARY 2023** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Classify Spirochaetes. Write in detail about the morphology, cultural characters, pathogenesis and lab diagnosis of Letopirosis.

II. Write notes on: **(6 x 4 = 24)**

1. Virulence factors and pathogenesis of Streptococcus pyogenes.
2. Gas gangrene.
3. Culture media.
4. Antigen presenting cells.
5. Moist heat sterilization.
6. Type II hypersensitivity reaction.

III. Short answers on: **(6 x 1 = 6)**

1. Fimbriae.
2. Testing of disinfectants.
3. Q fever.
4. Diphtheria toxin.
5. Innate immunity.
6. Super antigens.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0723] **JULY 2023** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Define Immune response. Write in detail about cell mediated immune response. Add a note on Antigen presenting cells.

II. Write notes on: **(6 x 4 = 24)**

1. Electron microscope.
2. Mutation.
3. Lab diagnosis of Mycobacterium tuberculosis.
4. Classification of streptococci.
5. Chlamydia trachomatis.
6. Lab diagnosis of Enteric fever.

III. Short answers on: **(6 x 1 = 6)**

1. Transposons.
2. Halophilic vibrios.
3. Cold sterilization.
4. Transport media.
5. Cytokines.
6. Haptens.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0224] **FEBRUARY 2024** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1 x 10 = 10)**

1. Define bacterial genetics. Write in detail the methods of gene transfer with diagrammatic representation.

II. Write notes on: **(6 x 4 = 24)**

1. Bacterial growth curve.
2. Complement pathway.
3. Lab diagnosis of Salmonella typhi.
4. Leptospirosis.
5. Antimircobical susceptibility testing.
6. Mycobacterium leprae.

III. Short answers on: **(6 x 1 = 6)**

1. Enriched media.
2. Robert Koch.
3. Herd immunity.
4. Histocompatibility antigens.
5. Diphtheria Prophylaxis.
6. Toxins of Staphylococcus aureus.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0824] **AUGUST 2024** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1+2+3+3+1= 10)**

1. A 25-year-old farmer was complaining of fever, headache and myalgia. He developed yellow discoloration of skin and sclera. On examination, he was icteric and hepatosplenomegaly present. His blood count showed neutrophilia and thrombocytopenia. Liver function showed elevated bilirubin with mild elevation of transaminases and he was also found to be oliguric and uremic.
   a) What is your diagnosis?
   b) Write in detail about
      a) Pathogenicity b) Epidemiology c) Lab diagnosis and
      d) Treatment of the disease.

II. Write notes on: **(6 x 4 = 24)**

1. Louis Pasteur.
2. Anaerobic culture methods.
3. Antigen presenting cells.
4. T cell maturation.
5. Halophilic Vibrios.
6. Toxins present in Staphylococcus aureus.

III. Short answers on: **(6 x 1 = 6)**

1. Carrier.
2. Enrichment media.
3. Herd immunity.
4. Allograft.
5. Donovan bodies.
6. Biological false positive reactions in syphilis.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MBBS 0325] **MARCH 2025** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATIONS

(For the arrear candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(3+3+2+2=10)**

1. Spaulding classification-based approach to Sterilization and Disinfection. Give an account of the processing and disinfection of endoscopes in clinical practice.
   a) Disinfection with sodium hypochlorite in hospital settings.
   b) Role of Hand rub solution in infection control.

II. Write notes on: **(6 x 4 = 24)**

1. Rheumatic fever.
2. Natural Killer cell.
3. Laboratory Diagnosis of Diphtheria
4. Congenital Syphilis
5. Diagnostic algorithm of Tuberculosis in RNTCP.
6. Major Histocompatibility Complex I antigen.

III. Short answers on: **(6 x 1 = 6)**

1. Interferon Gamma.
2. Type III hypersensitivity.
3. Bedaquiline.
4. Toll like receptor.
5. What is real time PCR?
6. Principle of Citrate Utilization Test.

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THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[MBBS 0725] **JULY 2025** **Sub. Code :5063**

M.B.B.S. DEGREE EXAMINATION

(For the arrear candidates admitted upto the Academic Year 2018-2019)

SECOND YEAR

PAPER III – MICROBIOLOGY – I

Q.P. Code: 525063

Time: Three hours **Maximum : 40 Marks**

Answer All Questions

I. Elaborate on: **(1+2+2+3+2= 10)**

1. A 30-year-old male was admitted to the hospital with complaints of low-grade fever, loss of weight, loss of appetite and chronic cough with expectoration for the past six months. Chest X-ray showed bilateral apical fibrocaseous lesion. Sputum examination showed long, slender and beaded acid-fast bacilli.
   (a) What is your diagnosis? Describe the (b) Pathogenesis
   (c) Clinical manifestations and (d) Laboratory diagnosis of the diagnosed disease. Add a note on its (e) Prophylaxis.

II. Write notes on: **(6 x 4 = 24)**

1. Robert Koch.
2. Methods of gene transfer and explain in detail about transduction.
3. Immunofluorescence.
4. Mechanism of autoimmunity.
5. Lab diagnosis of diphtheria.
6. Lab diagnosis of Trachoma.

III. Short answers on: **(6 x 1 = 6)**

1. Congenital infection.
2. Endotoxin.
3. Hapten.
4. Bombay blood group.
5. Significant Bacteriuria.
6. Neil-Mooser reaction.

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