August 2011

[KZ 1131] **Sub. Code : 1131**

B.S.M.S. DEGREE EXAMINATION.

(சித்த மருத்துவ அறிஞர்)

Second Professional Course

Paper VII — MICROBIOLOGY

Q.P. Code : 601131

Time : Three hours **Maximum : 100 marks**

Answer ALL questions.

I. Long Essay : (2 x 15 = 30)

1. Define and classify sterilisation. Explain in detail with diagram about Autoclave.
   கிருமி நீக்கம் என்றால் என்ன? அதன் வகைகள் யாவை? ஆட்டோகிளேவ் கிருமி நீக்கம் பற்றி படத்துடன் விவரி.

2. Describe the morphology pathogensis and lab diagnosis and prophylaxis of Rabies virus.
   ரேபிஸ் வைரஸின் தோற்றம், நோய்தொற்று, ஆய்வக கண்டுபிடிப்பு மற்றும் தடுப்பு முறை பற்றி விவரி.

II. Short notes : (10 x 5 = 50)

1. Flagella.
   பிளஜெல்லா.
2. Selective media.
   தேர்ந்தெடுக்கப்பட்ட ஊடகம்.
3. Coagulase test.
   கேயகுலேஸ் ஆய்வு.
4. Elek's gel precipitation test.
   எலெக்ஸ் ஜெல் வீழ்படிவு ஆய்வு.
5. EL-TOR vibrio.
   எல்-டார்-விப்ரியோ.
6. Lepromin Test.
   லெப்ரோமின் சோதனை.
7. Viral haem Haemagglutination.
   வைரஸ் ஹீம்அக்குளிட்டினேசன்.
8. Prophylaxis of Polio.
   போலியோ நோய் வருமுன் காக்கும் தடுப்பு முறைகள்.
9. Anaphylaxis.
   அனபைலேக்ஸிஸ்.
10. Mycetoma.
    மைசெட்டோமா.

III. Short answers : (10 x 2 = 20)

1. Koch's phenomenon.
   காக்கின் கோட்பாடு.
2. Mesosomes.
   மீசோசோம்கள்.
3. Opthalmia neonatorum.
   ஆபதால்மியா நியோநேட்டோரம்.
4. Mutation.
   திடீர் மாற்றம்.
5. M-Fadyean reaction.
   எம்பெடியன் விளைவு.
6. Anti tetanus serum.
   ஆன்டி டெட்டெனெஸ் சீரம்.
7. Surface antigen.
   மேற்பரப்பு ஆன்டிஜென்.
8. Antigenic shift.
   ஆன்டிஜென் மாற்றம்.
9. Opportunistic parasitic infection in AIDS.
   எய்ட்ஸ் நோயில் வரும் சந்தர்ப்பவாத தொற்றுகள்.
10. Types of Dermatophytes.
    டெர்மெட்டோ பைட்டுகளின் வகைகள்.

February 2012

[LA 1131] **Sub. Code : 1131**

B.S.M.S. DEGREE EXAMINATION

SECOND PROFESSIONAL COURSE

Paper – VII — NUNNUYIRIYAL (MICROBIOLOGY)

Q.P. Code: 601131

Time : Three hours Maximum : 100 marks

Answer ALL questions.

I. Elaborate on : (2 × 15 = 30)

1. Define and classify hypersensitivity. Explain in detail Type 1 hypersensitivity reactions.

2. Describe the structure of HIV virus. Discuss about the clinical features and the laboratory diagnosis of AIDS.

II. Write notes on : (10 × 5 = 50)

1. Candidiasis

2. Bacterial flagella

3. Satellitism

4. Laboratory diagnosis of pulmonary tuberculosis

5. Bacteriophage

6. Rabies vaccines

7. WIDAL test

8. Clostridium tetani

9. Antibiotic sensitivity test

10. Hepatitis B Virus.

III. Short Answers : (10 × 2 = 20)

1. L-forms

2. Bacterial growth curve

3. LJ medium

4. Name two pathogenic spirochaetes

5. MMR vaccine

6. Name four bacteria causing food poisoning

7. Define nosocomial infection

8. Draw and label IgM antibody

9. Mention various types of Pasteurisation

10. Name two dimorphic fungi.

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[LB 1131] **Sub. Code : 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAM – AUGUST 2012.

Paper VII — NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time : 180 minutes Maximum : 100 marks

Answer ALL questions

		Pages (Max.)	Time (Max.)	Marks (Max.)
I.	**Elaborate on :**			
1.	Anatomy and physiology of bacterial cell.	**16**	**25 min.**	**15**
2.	Laboratory diagnosis of diphtheria. Add a note on vaccination against diphtheria.	**16**	**25 min.**	**15**
II.	**Short notes on :**			
1.	Louis Pasteur.	**3**	**8 min.**	**5**
2.	Autoclave.	**3**	**8 min.**	**5**
3.	Complement.	**3**	**8 min.**	**5**
4.	Latex agglutination test.	**3**	**8 min.**	**5**
5.	Nagler's reaction.	**3**	**8 min.**	**5**
6.	Cholera red reaction.	**3**	**8 min.**	**5**
7.	Hib vaccine.	**3**	**8 min.**	**5**
8.	Dimorphic fungi.	**3**	**8 min.**	**5**
9.	HIV.	**3**	**8 min.**	**5**
10.	Polio virus.	**3**	**8 min.**	**5**
III.	**Short answers on:**			
1.	PCR.	**1**	**5 min.**	**2**

2.	Transport media.	**1**	**5 min.**	**2**
3.	Pure culture.	**1**	**5 min.**	**2**
4.	Normal flora.	**1**	**5 min.**	**2**
5.	Define: Affinity	**1**	**5 min.**	**2**
6.	Bombay blood group.	**1**	**5 min.**	**2**
7.	Quellung test.	**1**	**5 min.**	**2**
8.	Rabies vaccine.	**1**	**5 min.**	**2**
9.	Candidiasis.	**1**	**5 min.**	**2**
10.	Needle stick injury.	**1**	**5 min.**	**2**

[LC 1131] **Sub. Code : 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION — FEBRUARY 2013.

Paper VII — NUNNUYIRIYAL (MICROBIOLOGY)

Q.P. Code* : *601131

Time : Three hours **Maximum : 100 marks**

Answer ALL questions.

I. Essay on : **(2 × 15 = 30)**

1. Typical structure of an Immunoglobulin molecule.

2. Pathogenesis and Laboratory diagnosis of Vibrio cholera.

II. Short notes : **(10 × 5 = 50)**

1. Morphology of a bacteria.

2. Methods of transmission of infection.

3. Complement fixation test.

4. Infections caused by *Clostridium perfringens*.

5. Mantoux test.

6. Laboratory diagnosis of Rabies.

7. German measles.

8. Gonnorhoea.

9. Cryptococcosis.

10. General properties of viruses.

III. Short answers : **(10 × 2 = 20)**

1. Cold agglutinins.

2. Selective medium.

3. Metachromatic granules.

4. Australia antigen.

5. Oncogenes.

6. Break bone fever.

7. Id reaction.

8. Capsid symmetry.

9. ASO.

10. Zoonosis.

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[LD 1131] **Sub. Code : 1131**

SECOND B.S.M.S. DEGREE EXAMINATION — AUGUST 2013.
Paper VII — NUNNUYIRIYAL (MICROBIOLOGY)
Q.P. Code* : *601131

Time : Three hours **Maximum : 100 marks**

Answer ALL questions.

I. Essay on : **(2 × 15 = 30)**

1. Cultivation of viruses.
2. Clinical infections caused by *E.Coli*.

II. Short notes : **(10 × 5 = 50)**

1. Robert Koch.
2. Characteristic features of Antigens.
3. Staphylococcal infections.
4. Tetanospasmin.
5. Tuberculosis.
6. Widal test.
7. Lepromin test.
8. Pathogenesis of Adenovirus.
9. SARS.
10. Laboratory diagnosis of Fungi.

III. Short answers : **(10 × 2 = 20)**

1. Haptens.
2. Coomb's test.
3. Autoimmunity.
4. CRP.
5. Blue pus.
6. OPV.
7. PLT agents.
8. Negri bodies.
9. Penicillin.
10. PPA reaction.

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[LE 1131] **Sub. Code : 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION — FEBRUARY 2014.

Paper VII — NUNNUYIRIYAL (MICROBIOLOGY)

Q.P. Code* : *601131

Time : Three hours **Maximum : 100 marks**

Answer ALL questions.

I. Essay on : **(2 × 15 = 30)**

1. Bacterial identification.

2. Types of Hypersensitivity reactions.

II. Short notes : **(10 × 5 = 50)**

1. Bacterial growth curve.

2. Classical pathway of complement system.

3. Coagulase test.

4. Pathogenicity of *Corynebacterium diphtheria.*

5. Morphology and cultural characteristics of Clostridium tetani.

6. Freilander's bacillus.

7. Craigie's tube test.

8. Lymphogranuloma venereum.

9. Viral Haemagglutination.

10. Oncogenic viruses.

III. Short answers : **(10 × 2 = 20)**

1. Precipitation.

2. Pike's medium.

3. M. Fadyean's reaction.

4. Botulism.

5. Triple Antigen.

6. Weil Felix reaction.

7. Neill-Mooser reaction.

8. Madura foot.

9. BCG.

10. Interferons.

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[LF 1131] **AUGUST 2014** **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER - VII NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Physical methods of sterilisation.
2. Morphology, pathogenesis, lab diagnosis and prophylaxis of Rabies virus.

II. Short Notes: **(10 x 5 =50)**

1. Bacterial spore.
2. Anaerobic culture methods.
3. Types of Botulism.
4. Gonorrhoea.
5. Lepromin test.
6. Dermatophytes.
7. Bacteriophages.
8. Types of exposure of HIV virus and their relative risk.
9. Dengue virus.
10. Laborary diagnosis of "Hepatits B" virus.

III. Short Answers: **(10 x 2 =20)**

1. Generation time.
2. Vectors.
3. Klebs – Loeffler Bacillus.
4. Deficiencies of complement factors.
5. CAMP test.
6. El tor vibrios.
7. Piedra.
8. Intra cytoplasmic inclusion bodies.
9. Prions.
10. Rota virus.

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[LG 1131] **FEBRUARY 2015** **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER - VII NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Define Sterilization. Classify moist heat sterilization. Explain the principle and function of Autoclave.

2. Write an essay on the morphology, cultural characteristics, laboratory diagnosis and pathogenesis of Mycobacterium tuberculosis.

II. Write Notes on: **(10 x 5 = 50)**

1. Dimorphic fungi.
2. Bacterial capsule.
3. Nagler's reaction.
4. Laboratory diagnosis of Cholera.
5. Bacteriophage.
6. Rabies vaccines.
7. VDRL test.
8. Tetanus.
9. Antibiogram.
10. HIV.

III. Short Answers on: **(10 x 2 = 20)**

1. LGV.
2. Who is the father of Antiseptics?
3. TCBS.
4. Name two dermatophytes.
5. BCG vaccine.
6. Name four bacterias causing diarrhea.
7. IMViC Test.
8. Draw and label bacterial flagella.
9. What is cold sterilization?
10. Name two anaerobic bacteria.

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[LH 1131] **AUGUST 2015** **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER - VII NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Pathogenesis and lab diagnosis of *Staphylococccus aureus.*
2. Hepatitis B Viral infections and lab diagnosis.

II. Write Notes on: **(10 x 5 = 50)**

1. Edward Jenner.
2. Syphilis.
3. Pathogenicity of *Haemophilus influenzae*.
4. Characteristic features of Antigens.
5. Delayed hypersensitivity.
6. Viral vaccines.
7. Cryptococcosis.
8. Mycotoxins.
9. Rabies.
10. Clinical features of Mumps.

III. Short Answers on: **(10 x 2 = 20)**

1. Indole test.
2. Anaerobes.
3. Morphology of *Clostridium tetani*.
4. Coombs test.
5. Rheumatoid arthritis.
6. H1N1.
7. OPV.
8. Dimorphic fungi.
9. Penicilliosis.
10. Tric agents.

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[LI 1131] FEBRUARY 2016 **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe the structure of the HIV virus with labeled diagram. Explain in detail the pathogenesis and laboratory diagnosis of AIDS.

2. Classify hypersensitivity. Write in detail about type-1 hypersensitivity.

II. Write Notes on: **(10 x 5 = 50)**

1. WIDAL test.
2. Pili.
3. Coagulase test.
4. Polio Virus.
5. IgM Antibody.
6. BCG vaccine.
7. Candida.
8. Auto-immunity.
9. Dermatophytes.
10. NGU.

III. Short Answers on: **(10 x 2 = 20)**

1. Nosocomial infection.
2. Transport medium.
3. Name two gaseous sterilants.
4. Name the four bacteria causing food poisoning.
5. Cholera Red reaction.
6. What is bacteriological index?
7. Swine flu.
8. Dimorphic fungi.
9. Quellung reaction.
10. MMR vaccine.

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[LJ 1131] AUGUST 2016 **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Autoimmune diseases.
2. Dermatophytic infections.

II. Write Notes on: **(10 x 5 = 50)**

1. Robert Koch.
2. Tuberculosis.
3. Pathogenicity and lab diagnosis of Gonococci.
4. Lab diagnosis of diphtheria bacilli.
5. Structure of IgG.
6. National immunization schedule.
7. General properties of viruses.
8. SARS.
9. HAV infections.
10. Aspergillosis.

III. Short Answers on: **(10 x 2 = 20)**

1. Bacterial Growth curve.
2. Tuberculin test.
3. Anthrax.
4. Travellers diarrhoea.
5. Phagocytosis.
6. Histoplasmosis.
7. Dengue.
8. Negri bodies.
9. Oncogenes.
10. Psittacosis.

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[LL 1131] AUGUST 2017 **Sub.Code :1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe detailed notes on sterilization with chemical agents and its mode of action.
2. Discuss about the detailed course of rabies disease in human beings and its diagnosis with treatment.

II. Write Notes on: **(10 x 5 = 50)**

1. Explain about the principle involved in Gram's staining technique.
2. Write the description of Flemming's discovery in microbiology.
3. Discuss about the pathogenic factors of *Vibrio cholerae* and its clinical symptoms.
4. Describe about the bacterial haemolytic pattern with examples.
5. What are the various *invivo* and *invitro* virulence tests performed for *Corynebacterium diptheriae* infection?
6. Write about brief note on systemic autoimmune diseases.
7. Explain about the mechanism of agglutination and its applications.
8. Describe the pathogenesis of dermatophytosis.
9. Explain about the methods used for viral cultivation.
10. Describe the vaccines in active immunization of bacterial diseases.

III. Short Answers on: **(10 x 2 = 20)**

1. Define resolving power of the microscope.
2. Explain sterilisation.
3. How do cultivate the *Mycobacterium leprae*?
4. Which is the causative agent for gas gangrene?
5. Write about bolulinum toxin.
6. Write about WIDAL test.
7. Write about complement system.
8. Explain aspergilloma.
9. Give some examples of antiviral drugs for HIV patients.
10. Examples of UTI causing bacterial pathogens.

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[LM 1131] FEBRUARY 2018 **Sub. Code: 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe detailed notes on the pathogenesis and laboratory diagnosis of enteric fever with its treatment.
2. How do classify Hepatitis virus? Explain the properties and clinical features of infectious and serum hepatitis.

II. Write Notes on: **(10 x 5 = 50)**

1. Explain about the types of staining technique for bacterial identification.
2. How will you determine the antimicrobial activity of disinfectant?
3. Describe about sterilization by autoclave and hot air oven and its sterilization controls.
4. What are the toxins and enzymes produced by *Staphylococcus aureus?*
5. Explain about the mechanism of precipitation and its applications.
6. What are the organs in the central lymphoid system for functioning immunity?
7. Explain about the dermatophytic infections.
8. Give a detailed account on dengue fever.
9. What are the common types of hospital acquired infections?
10. Write a bacterial toxin responsible for food borne illness.

III. Short Answers on: **(10 x 2 = 20)**

1. Explain about Koch's postulate.
2. What is Hypersensitivity?
3. Write about the pigments produced by *Pseudomonas* bacteria.
4. Give examples of acid fast bacteria.
5. What is Rheumatoid arthritis?
6. What are the medium used for fungal culture?
7. Explain mycetism.
8. Write about Antigens.
9. Write about bacteraemia and septicaemia.
10. Explain PUO.

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[LN 1131] AUGUST 2018 **Sub. Code: 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Describe detailed notes on antigen - antibody reaction and its types.

2. Explain in detail information for opportunistic infections associated with HIV infectious cases.

II. Write Notes on: **(10 x 5 = 50)**

1. Describe the antibodies.
2. Explain about the selective and differential media in bacterial cultivation technique.
3. Write a brief note for gases in sterilizing agents and its mode of action.
4. Describe the pathogenic characters of *Mycobacterium tuberculosis.*
5. What are the toxins and enzymes produced by *Streptococcus pyogenes*?
6. Describe the laboratory diagnosis of typhoid fever.
7. Write about brief note on localized autoimmune diseases.
8. Explain about the *Microsporum* in dermatophytic infections.
9. Describe detailed notes on opportunistic mycosis.
10. Write a brief note on infections.

III. Short Answers on: **(10 x 2 = 20)**

1. How bacterial capsules were examined?
2. Define pleomorphism.
3. Write about the uses of Elek's gel precipitation test.
4. Write about the morphological characters of *Clostridium tetani*.
5. Give examples of live and heat killed vaccines for bacterial diseases.
6. Explain PUO.
7. Write about Aflatoxin.
8. Write the causative agent for histoplasmosis.
9. Explain plaque assay and pock assay.
10. Write about WIDAL test.

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[LO 1131] FEBRUARY 2019 **Sub. Code: 1131**

SECOND PROFESSIONAL B.S.M.S. DEGREE EXAMINATION

PAPER VII – NUNNUYIR IYAL (MICROBIOLOGY)

Q.P. Code : 601131

Time: Three Hours **Maximum : 100 Marks**

I. Elaborate on: **(2 x 15 = 30)**

1. Write in detail about the structure of a Bacterial cell with a diagram.
   பாக்டீரியல் செல்லின் உருவயியலை வரைபடத்துடன் விளக்குக.

2. Mycobacterium leprae.
   மைக்கோபாக்டீரியம் லெப்ரே.

II. Write Notes on: **(10 x 5 = 50)**

1. Anaerobic Culture Method.
   அனேரோபிக் பாக்டீரியா வளர் முறைகள் பற்றி எழுதுக.

2. BioFilm.
   பையோபிலிம்.

3. Botulism.
   பொடுலிஸம்.

4. Proteus.
   ப்ரோட்டியஸ்.

5. Primary Immunodeficiencies.
   முதன்மை நோய்த்தடுப்புக் குறைபாடு.

6. Mannan – binding Lectin pathway.
   மேனன் - பைண்டிங் லெக்டீன் வழிபாதை என்றால் என்ன?

7. Torulosis.
   டோரூலாஸிஸ்.

8. Mycetoma.
   மைசிடோமா.

9. Write about oncogenic virus.
   புற்று நோய் உண்டாக்கக் கூடிய வைரஸ்.

10. Cell culture and detection of viral growth.
    வைரஸ் செல் வளர்ப்பு முறை மற்றும் கண்டுபிடித்தல் பற்றி விளக்குக.

III. Short Answers on: **(10 x 2 = 20)**

1. Difference between Conidiospores and Sporangiospores.
   கோனிடியோ ஸ்போர்ஸ் மற்றும் ஸ்போராஞ்சியோ ஸ்போர்களின் வேறுபாட்டினை விவரி.

2. Triple Sugar Iron medium.
   மூச்சர்க்கரை இரும்பு வளர் ஊடகம்.

3. LJ medium.
   எல். ஜே மீடியம்.

4. Nagler reaction.
   நாக்லர் எதிர்வினை.

5. Metachromatic granules.
   மெட்டாக்ரோமாடிக் கிரான்யூல்ஸ்.

6. Wasserman Reaction.
   வாசர்மேன் வினை.

7. Koch Postulates.
   கோச் பாஸ்டுலேட்ஸ்.

8. Piedra.
   பூட்ரா.

9. Molluscum Contagiosum.
   மோலஸ்கம் கண்டேஜியோசம்.

10. Strategies for HIV Testing.
    எச்.ஐ.வி யை கண்டறிய பயன்படுத்தும் உத்திகளை கூறுக.

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