[KD 521]

Sub. Code: 4023

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

(Common to all Regulations)

Part I

Paper III - MICROBIOLOGY - I

Time: Three hours

Maximum: 100 marks

Two and a half hours

Sec. A & Sec. B: 70 marks

for Sec. A & Sec. B

Section C: 30 marks

Separate answer bocks must be used for Sections A and B.

Section C must be answered separately on the answer sheet provided as per the instructions on the first page.

Answer ALL questions.

SECTION A

- 1. Discuss the mechanisms of drug resistance in bacteria. (15)
- 2. Write briefly on:

 $(4 \times 5 = 20)$

- (a) Larva migrans.
- (b) Hot air oven.
- (c) Monoclonal antibody.
- (d) Enrichment media.

SECTION B

3. Name the viviparous nematodes. Describe the life cycle and laboratory diagnosis of any one of them. Add a note on prevention and control of Bancroftian filariasis.

(15)

4. Write briefly on:

 $(4 \times 5 = 20)$

- (a) Antibiotic sensitivity tests.
- (b) Phenotypic variations in bacteria.
- (c) Active immunity.
- (d) Bacterial capsule.

SECOND M.B., B.S. DEGREE EXAMINATION.

Part I

Paper III — Microbiology — I

(General Microbiology, Immunology and Parasitology)

: Three hours

Maximum : 90 mark

Separate answer books must be used for Sections A and B.

Section C must be answered separately on the answer sheet placed inside the question paper booklet as per the instructions on the first page.

Answer ALL the questions.

Draw diagrams wherever needed for answers in Sections A and B.

SECTION A - (2 \times 15 = 30)

Describe the structure of a bacterial cell.

Classify Audoimmune diseases. Describe the mechanism utoimmunity with suitable examples.

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SECTION B $-(6 \times 5 = 30)$

Write short notes on any SIX of the following:

- (a) Tyndallisation.
- (b) Transport media.
- (c) Plasmids.
- (d) B lymphocyte.
- (e) Passive agglutination.
- (f) Thread worm.
- (g) Occult filariasis.
- (h) Black water fever...

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

(Common to all Regulations)

Part I

Paper III - MICROBIOLOGY - I

Time: Three hours Maximum: 100 marks

Two and a half hours Sec. A & Sec. B: 70 marks

for Sec. A and Sec. B Section C: 30 marks

Section C must be answered separately on the answer sheet provided as per the instructions on the first page.

Answer ALL questions.

SECTION A — (35 marks)

- 1. Define sterilization. Mention the various methods of sterilization by moist heat and write briefly about autoclaving. (15)
- 2. Write short notes on:

 $(4 \times 5 = 20)$

- (a) Theories of autoantibody formation.
- (b) Culture methods for anaerobes.
- (c) Delayed type hypersensitivity.
- (d) Differentiate between exotoxin and endotoxin.

SECTION B — (35 marks)

- 3. Enumerate the plasmodia of human importance. Describe the life cycle, pathogenesis and laboratory diagnosis of falciparum malaria. (15)
- 4. Write short notes on :

 $(4\times5=20)$

- (a) Primary amoebic meningo-encephalitis.
- (b) Redia and Cercariae.
- (c) Larva migrans.
- (d) Concentration methods in stool examination.

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

Part I

(Common to All Regulations)

Paper III — MICROBIOLOGY — I

Time: Three hours

Maximum: 100 marks

Two and a half hours

Sec. A & Sec. B: 70 marks

for Sec. A & Sec. B.

Section C: 30 marks

Section C must be answered separately on the answer sheet provided.

Answer ALL the questions.

Draw diagrams wherever necessary.

SECTION A — (35 marks)

- 1. Describe the anatomy of Bacterial cell. Add a note on the physical requirements for the growth of the bacteria. (15)
- 2. Write short notes on:

 $(4 \times 5 = 20)$

- (a) Plasmodium falciparum.
- (b) Cysticercosis.
- (c) Carriers.
- (d) Application of ELISA TEST.

SECTION B — (35 marks)

- 3. Enumerate the methods of sterilisation. Describe moist-heat-methods. Add a note of testing of Disinfectants. (15)
- 4. Write short notes on:

 $(4 \times 5 = 20)$

- (a) Trichomonas vaginalis.
- (b) Enriched media.
- (c) Cyclops.
- (d) Complement Fixation Test.

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Sub. Code: 4023

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

(Common to all Regulations)

Part I

Paper III — MICROBIOLOGY — I

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

MCQ: Twenty minutes MCQ: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essay:

 $(2 \times 15 = 30)$

- (1) Give an account of various cells involved in immunity and describe their role in the functioning of immune system. (15)
- (2) Enumerate the cestodes infecting man. Describe the life cycle, pathogenicity and laboratory diagnosis of Echinococcus granulosus. (15)

II. Write short notes on:

 $(10 \times 5 = 50)$

- (a) Endospores
- b) Gaseous method of sterilization
- (c) Differentiate between mutational and transferable drug resistance
 - (d) Oncofetal antigens
 - (e) Anaerobic media
 - (f) Laboratory diagnosis of Kala azar
 - (g) Microfilariae
 - (h) Bile stained eggs
 - (i) Trichomonas
 - (i) Complement.

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

(Common to all Regulations)

Part I

Paper III — MICROBIOLOGY — I

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Write Essay:

 $(2 \times 15 = 30)$

- (I) Define and classify immunity. Discuss in detail the mechanism of innate immunity.
- (2) Classify nematodes. Describe the life cycle, pathogenicity and laboratory diagnosis of filariasis.

II. Write short notes on :

 $(10 \times 5 = 50)$

- (a) Bacterial growth curve.
- (b) Autoclave.
- (c) Selective media.

- (d) Anaerobic culture methods.
- (e) Conjugation.
- (f) Immunoglobulin-A
- (g) Coomb's test.
- (h) Schwartzman Reaction.
- (i) Laboratory diagnosis of malaria.
- (j) Lerva migrans.