

APRIL 2001

[KD 233]

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

Final — Branch V — Microbiology

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Describe the various methods of cultivation of viruses in tissues and the cytopathic effects they produce. (25)
 2. Enumerate the haemoflagellates and discuss the laboratory diagnosis of kala-azar. (25)
 3. Discuss the mode of transmission, pathogenesis and prophylaxis of poliomyelitis virus. (25)
 4. Write briefly on : (5 × 5 = 25)
 - (a) Primary amoebic meningoencephalitis
 - (b) Viral inclusions
 - (c) Paul Bunnell test
 - (d) Hepatitis A virus
 - (e) Erythrocytic phase of malarial parasite
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SEPTEMBER 2002

[KH 233]

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

Final — Branch V — Microbiology

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Describe the structure of Human Immunodeficiency Virus. Discuss the laboratory diagnosis of HIV infection. (25)

2. Name the DNA viruses that cause human infections. Discuss the transmission, pathogenesis and prevention of chicken pox. (25)

3. Name the tissue nematodes. Describe the life cycle of the filarial worm and laboratory diagnosis of filariasis. (25)

4. Write briefly on :

(5 × 5 = 25)

(a) Cell culture

(b) Rabies vaccines

(c) Prions

(d) Acanthamoeba

(e) Casoni's test.

APRIL 2003

[KI 233]

Sub. Code : 2978

M.Sc. (Non-clinical) DEGREE EXAMINATION.

Final

Branch V — Microbiology

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Enumerate the viruses which cause hepatitis. Describe the modes of transmission, pathogenesis and laboratory diagnosis of Hepatitis B Virus. (25)
 2. Name the intestinal nematodes. Describe the life cycle and pathogenesis of Strongyloides. (25)
 3. Classify Arboviruses. Discuss the mode of transmission, pathogenesis and prophylaxis of Japanese B encephalitis. (25)
 4. Write briefly on : (5 × 5 = 25)
 - (a) Negri bodies.
 - (b) Trichomonas Vaginalis.
 - (c) Cysticercosis.
 - (d) Leishman Donovan bodies.
 - (e) Polio Vaccines.
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APRIL 2004

[KK 233]

Sub. Code : 2978

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

Final

Branch V — Microbiology

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours Maximum : 100 marks

Sec. A & B : Two hours and Sec. A & B : 80 marks
forty minutes

Sec. C : Twenty minutes Sec. C : 20 marks

Answer Sections A and B in the **SAME** answer book.

Answer Section C in the answer sheet provided.

SECTION A

1. Describe the laboratory diagnosis and prevention of influenza virus infection. (15)
2. Classify Nematodes. Describe the life cycle and laboratory diagnosis of *ancylostoma duodenale*. (15)

SECTION B

3. Write short notes on the following : (10 × 5 = 50)
 - (a) Cysticercosis.
 - (b) Laboratory diagnosis of toxoplasmosis.

- (c) MMR vaccine.
- (d) Cell culture.
- (e) Dengue fever.
- (f) Cyclops.
- (g) *Cryptosporidium*.
- (h) Casoni's Test.
- (i) Epstein Barr virus.
- (j) Viral inclusion bodies.

MARCH 2005

[KM 233]

Sub. Code : 2978

M.Sc. (Non-clinical) DEGREE EXAMINATION.

Branch V — Microbiology

Final

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours Maximum : 100 marks

Sec. A & B : Two hours and Sec. A & B : 80 marks
forty minutes

Section C : Twenty minutes Section C : 20 marks

Answer Sections A and B in the SAME Answer Book.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

- 1. Classify hepatitis viruses. Describe the laboratory diagnosis of hepatitis B virus. (15)**
- 2. Name the different oncogenic viruses and discuss the mechanisms of viral oncogenesis. (15)**

SECTION B — (10 × 5 = 50 marks)

- 3. Write short notes on :**
 - (a) Granulomatous anebic encephalitis**
 - (b) Babesiosis**
 - (c) Sporogony**
 - (d) Laboratory diagnosis of toxoplasmosis**

- (e) Feces examination for protozoal cysts**
 - (f) Antimalarial vaccines**
 - (g) Immuno diagnosis of parasitic infections**
 - (h) Viral replication**
 - (i) Cytopathic effects**
 - (j) Ebola virus.**
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MARCH 2006

[KO 233]

Sub. Code : 2978

M.Sc. (Non-clinical) DEGREE EXAMINATION.

Branch V — Microbiology

Final

Paper III —VIROLOGY AND PROTOZOOLOGY

Time : Three hours

Maximum : 100 marks

**Sec. A & B : Two hours and
forty minutes**

Sec. A & B : 80 marks

Sec. C : Twenty minutes

Sec. C : 20 marks

Answer Sections A and B in the SAME Answer Book.

Answer Section C in the answer sheet provided.

SECTION A — (2 × 15 = 30 marks)

- 1. Classify Retroviruses. Discuss in detail morphology, pathogenesis and lab diagnosis of Human Immuno deficiency virus.**
- 2. Classify Herpes Viridae. Discuss in detail morphology, pathogenesis and lab diagnosis Herpes Simplex Virus I.**

SECTION B — (10 × 5 = 50 marks)

- 3. Write short notes on :**
 - (a) Antigenic variations of Influenza virus**
 - (b) Viral vaccines**

- (c) Pathogenic amoebae**
 - (d) Inclusion bodies**
 - (e) Balantidium coli**
 - (f) Protozoan diarrhoea**
 - (g) PKDL**
 - (h) T.vaginalis**
 - (i) Chagas disease**
 - (j) Babesiosis.**
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[KR 233]

Sub. Code : 2978

II. Short notes :

(6 × 5 = 30)

M.Sc. (Non-Clinical) DEGREE EXAMINATION.

Final

Branch V — Microbiology

Paper III — VIROLOGY AND PROTOZOOLOGY

Time : Three hours

Maximum : 100 marks

Theory : Two hours and
forty minutes

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

I. Essay :

(1) Describe pathogenesis, laboratory diagnosis and prevention of hepatitis B virus. (20)

(2) Describe life cycle and laboratory diagnosis of leishmania donovani. (15)

(3) Classify Nematodes. Describe the life cycle and laboratory diagnosis of ancylostoma duodenale. (15)

- (a) Cerebral Malaria.
 - (b) Loa Loa
 - (c) Japanese B encephalitis
 - (d) Herpes Zoster
 - (e) Isospora Belli
 - (f) Free living amoebae.
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M.Sc (Non Clinical) DEGREE EXAMINATION

FINAL

Branch V –MICROBIOLOGY

Paper III – VIROLOGY AND PROTOZOOLOGY

Q.P. Code : 282978

Time : Three hours

Maximum : 100 marks

Answer All questions.

I. Essays:

(2 X 20=40)

1. Write in detail about morphology, pathogenesis, laboratory diagnosis and prevention of human immunodeficiency virus.
2. Describe the morphology, life cycle, laboratory diagnosis and prevention of leishmania denovani.

II. Write Short Notes on :

(10X 6 = 60)

1. Rota virus.
2. Rabies vaccine.
3. Cytopathic effects.
4. Lab diagnosis of hepatitis B virus.
5. NIPAH virus.
6. Lab diagnosis of amoebiasis.
7. Trichomonas vaginalis.
8. Cryptosporidium.
9. Acanthamoeba.
10. Formal - ether sedimentation technique.

[KZ 1011]

Sub. Code: 2978

**M.Sc NON-MEDICAL DEGREE EXAMINATION
FINAL YEAR
BRANCH V - MICROBIOLOGY
PAPER III – VIROLOGY AND PROTOZOOLOGY
Q.P. Code : 282978**

**Time : 3 hours
(180 Min)**

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages (Max.)	Time (Max.)	Marks (Max.)
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1 Classify Arboviruses. Discuss briefly on Arboviral diseases in India.

17	40	20
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2. Discuss the Laboratory diagnosis of Malaria with special reference to recent advances.

17	40	20
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II. Write notes on :

1. Cytomegaloviruses

4	10	6
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2. Antigenic variations in Influenzae A

4	10	6
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3. Live viral vaccines

4	10	6
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4. Epidemiology of HIV in India

4	10	6
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5. Hepatitis B Carriers

4	10	6
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6. Viral haemorrhagic fevers

4	10	6
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7. Cultivation of Leishmania

4	10	6
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8. Amoebic dysentery

4	10	6
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9. Important features of Trichomonas vaginalis

4	10	6
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10. Lab diagnosis of Toxoplasmosis

4	10	6
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[LB 1012]

OCTOBER 2012

Sub. Code: 2978

M.Sc NON-MEDICAL DEGREE EXAMINATION

FINAL YEAR

BRANCH V - MICROBIOLOGY

PAPER III – VIROLOGY AND PROTOZOOLOGY

Q.P. Code : 282978

Time : 3 hours
(180 Min)

Maximum : 100 marks

Answer ALL questions in the same order.

I. Elaborate on :

Pages Time Marks
(Max.)(Max.)(Max.)

- | | | | |
|--|----|----|----|
| 1. Describe the life cycle, pathogenesis and lab diagnosis of Plasmodium falciparum. Add a note on the differences between Plasmodium falciparum & Plasmodium vivax in peripheral smear. | 17 | 40 | 20 |
| 2. Classify Herpesviridae. Describe the pathogenesis and Laboratory diagnosis of Herpes simplex viruses. | 17 | 40 | 20 |

II. Write notes on :

- | | | | |
|--|---|----|---|
| 1. General characteristics of Cestodes. | 4 | 10 | 6 |
| 2. Giardia lamblia. | 4 | 10 | 6 |
| 3. Lab diagnosis of Toxoplasma gondii. | 4 | 10 | 6 |
| 4. Lab diagnosis of Wuchereria bancrofti. | 4 | 10 | 6 |
| 5. Enterobius vermicularis. | 4 | 10 | 6 |
| 6. Serological markers of Hepatitis B virus. | 4 | 10 | 6 |
| 7. Describe the clinical features and Lab diagnosis of Dengue. | 4 | 10 | 6 |
| 8. Lab diagnosis of Rabies. | 4 | 10 | 6 |
| 9. Antigenic shift and drift. | 4 | 10 | 6 |
| 10. Lab diagnosis of HIV. | 4 | 10 | 6 |

[LD 1013]

OCTOBER 2013
M.Sc NON-MEDICAL DEGREE EXAMINATION
FINAL YEAR
BRANCH V - MICROBIOLOGY
PAPER III – VIROLOGY AND PROTOZOOLOGY

Sub. Code: 2978

Q.P. Code : 282978

Time : 3 hours

Maximum : 100 marks

Answer ALL questions

I. Elaborate on :

(2X20=40)

1. Describe the morphology, pathogenesis, lab diagnosis and Immuno prophylaxis of Hepatitis B virus.
2. Describe in detail the life cycle , pathogenesis and lab diagnosis of Entamoeba histolytica. Add a note on extraintestinal amoebiasis.

II. Write notes on :

(10X6=60)

1. Pathogenesis and laboratory diagnosis of Leishmania donovani.
2. Cysticercosis cellulosae.
3. Cryptosporidium parvum.
4. Lab diagnosis of Plasmodium falciparum.
5. Strongyloides stercoralis.
6. Lab diagnosis of HIV.
7. Cell culture and cytopathic effect.
8. Lab diagnosis and immunoprophylaxis of polio.
9. Classify arboviruses. List arboviruses seen in India.
10. H1N1 virus.
