

**BLDE UNIVERSITY**  
**POST GRADUATE DEGREE EXAMINATION**

[Time : 3 Hours]

[Max.Marks : 100]

**MD MICROBIOLOGY – PAPER -I**  
**QP CODE : 5017**

Your answer should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.  
Each answer should be written on new page only.

**LONG ESSAY**

**(2X20=40 Marks)**

1. Describe the different methods of transmission of genetic material between bacteria.

Add a note about the genetic mechanisms of drug resistance. (15+5)

2. Enumerate the different pathways of complement activation.

Discuss the lectin complement pathway activation and biological function of complement. (5+15)

**SHORT ESSAY**

**(6X10=60 Marks)**

3. De George's Syndrome
4. Delayed hypersensitivity
5. Plasma sterilization.
6. Anaerobic culture methods.
7. Nutritional requirements for growth of bacteria
8. ADCC (Antibody dependent cellular cytotoxicity)

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[3 Hours]

[Max.Marks : 100]

**MD MICROBIOLOGY – PAPER -II**

**QP CODE : 5018**

Your answer should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Each answer should be written on new page only.

**LONG ESSAY**

**(2X20=40 Marks)**

1. Describe the various Virulence factors and infections produced by *Staphylococcus aureus*. Also describe the laboratory diagnosis of Staphylococcal infections with emphasis on detection and importance of MRSA. (8+12)
2. Describe in detail infections produced by *Clostridium perfringens*. Describe the laboratory diagnosis of gas gangrene. (12+8)

**SHORT ESSAY**

**(6X10=60 Marks)**

3. *Mycobacterium leprae*.
4. Relapsing fever.
5. *Haemophilus influenzae*.
6. *Neisseria gonorrhoea*.
7. TRIC agents.
8. Laboratory diagnosis of urinary Tract Infection.

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[Time : 3 Hours]

[Max.Marks : 100]

**MD MICROBIOLOGY – PAPER -III**

**QP CODE : 5019**

Your answer should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

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**LONG ESSAY**

**(2X20=40 Marks)**

1. Name viruses causing congenital infections. Describe the pathogenesis and laboratory diagnosis of Cytomegalovirus (CMV). (4+6+10)
2. List the fungi causing infections in an immune compromised host. Describe in detail about laboratory diagnosis of Aspergillosis.

**SHORT ESSAY**

**(6X10=60 Marks)**

3. Describe the laboratory diagnosis of Mucormycosis.
4. Describe the laboratory diagnosis of coxsackie viral infections.
5. Laboratory diagnosis of Oculomycosis.
6. Describe diarrhoeogenic Viruses.
7. Describe Antirabies vaccine.
8. Mycotoxicosis.

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[3 Hours]

[Max.Marks : 100]

**MD MICROBIOLOGY – PAPER -IV**  
**QP CODE : 5020**

Your answer should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary.  
Each answer should be written on new page only.

**LONG ESSAY**

(2X20=40 Marks)

1. Enumerate the amoebae morphologically similar to *Entamoeba histolytica*.  
Discuss pathogenesis and diagnosis of *Entamoeba histolytica*. Add a note on vaccine trial in amoebiasis. (2+12+6)
2. Describe the pathogenesis, life cycle and laboratory diagnosis of cystic echinococcosis. (5+5+10)

**SHORT ESSAY**

(6X10=60 Marks)

3. Laboratory diagnosis of filariasis.
4. *Balamuthia* spp.
5. Parasitic vaginosis.
6. *Paragonimus* infection in India
7. Trichinellosis in India .
8. *Ancylostoma caninum*.