

(ii) Why candidiasis occur most frequently in AIDS patients. Describe clinical symptoms of Candidiasis? 3

9. Describe the causative agent, symptoms, diagnosis and treatment of Malaria. 8

Roll No. ....

92072

**B. Sc. (Bio-Technology) 3rd Semester  
Examination – December, 2012**

**MEDICAL MICROBIOLOGY**

Paper : BT-301

Time : Three hours ]

[ Maximum Marks : 40

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.

Note : Question No 1 is compulsory. Attempt four questions from Question No. 2 to 9 i.e. one from each Unit.

1. (i) What are causative agent of Gas gangrene. Hansen disease, Anthrax, Tuberculosis, Botulism and what are their Gram staining reaction? 2

(ii) Why Chlamydia and Rickettsiae are known as energy parasite. Differentiate between reticulate body and elementary body in chlamydia life cycle. 2

C. botulinum

→ belongs to Aspergillus

→ Basidiomycetes

→ Dermatophyton

(iii) Describe the structure of virus. Give two examples of DNA and RNA virus each. 2

(iv) Write down silent features of Ascomycetes, Basidiomycetes and Deuteromycetes. 2

### UNIT - I

2. What do you mean by virulence factors? Describe the role of virulence factors associated with pathogenesis of Mycobacterium tuberculosis? What is tuberculin skin test? 8

3. (i) Differentiate between toxin and toxoid? What toxins are used for making toxoid for vaccination? 5

(ii) Write down principle and procedure of Dick test. 3

### UNIT - II

4. (i) Enumerate important diseases caused by Anaerobic microorganisms. Write down toxin responsible for these diseases. 3

(ii) How Treponema pallidum spread in population? Describe pathogenesis, clinical symptoms and diagnosis of Syphilis. 5

5. (i) How will you differentiate lactose fermenting and lactose non-fermenting bacteria? 3

(ii) Explain the pathogenesis, clinical symptoms and laboratory diagnosis of Cholera. 5

### UNIT - III

5. Describe its clinical symptoms, laboratory diagnosis and preventive measures of Dengue fever. 8

7. (i) How Rabies virus replicate inside cell? Describe clinical symptoms and diagnosis of Rabies. 5

(ii) What do you mean by H type and N type in influenza virus? Which H & N type combinations were recently reported by scientists in Swine flu and Avian flu? 3

### UNIT - IV

8. (i) What is the etiological agent of Histoplasmosis? How it can be diagnosed and treated? 5