

Roll No. : .....

Invigilator's Signature : .....

# CS/B.OPTM/SEM-3/BO-303/2011-12 2011

## MEDICAL PATHOLOGY & MICROBIOLOGY (GENERAL & OCULAR)

Time Allotted : 3 Hours

Full Marks: 70

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## **GROUP** – A

## ( Multiple Choice Type Questions )

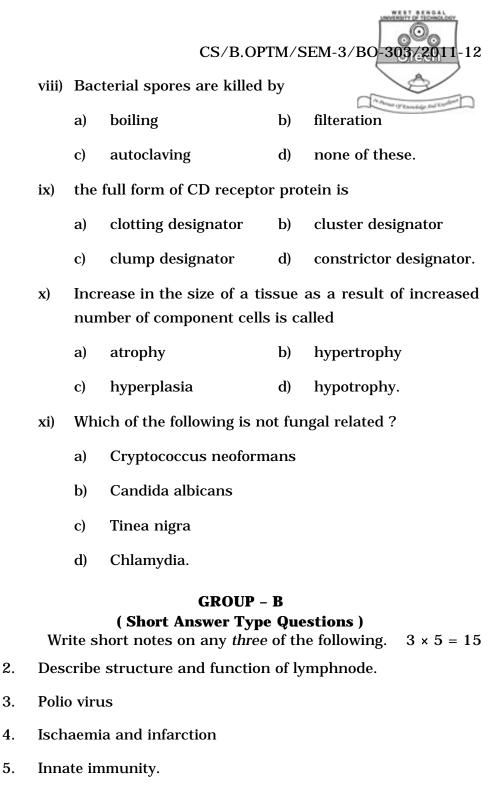
- 1. Choose the correct alternatives for any *ten* of the following :  $10 \times 1 = 10$ 
  - i) Facultative anaerobic bacteria
    - a) do not tolerate oxygen
    - b) require low level of oxygen to grow
    - c) can be grown anaerobically as well as aerobically
    - d) none of these.
  - ii) Immunological surveillance is the function of
    - a) antibody b) antigen
    - c) all lymphocytes d) natural killer cells.

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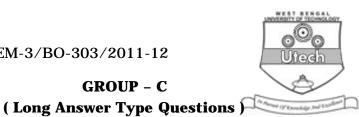


- iii) Which of the following is the most important structure related to microbial attachment to cells?
  - a) Falgellum b) Plasmid
  - c) Peptidoglycan d) Glycocalix.
- iv) Which of the following diseases and bacteria are matched up incorrectly ?
  - a) Cellulitis Pasteurella multocida
  - b) Tularemia Francisella tularensis
  - c) Gastritis Heliobacter pylori
  - d) Lyme disease Yersinia pestis.
- v) All are DNA containing virus except
  - a) Pox virus b) Herpes virus
  - c) Adeno virus d) Polio virus.
- vi) AIDS is caused by Human Retro Virus that kills
  - a) B lymphocytes
  - b) Lymphocyte stem cell
  - c) CD-4 positive T Lymphocyte
  - d) CD-8 positive T Lymphocyte.
- vii) Hassall's corpuscles is found in
  - a) lymph node b) spleen
  - c) thymus d) blood vessels.
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#### **GROUP - C**

Answer any *three* of the following.  $3 \times 15 = 45$ 

- 6. Explain spore formation of bacteria. What are the factors responsible for bacterial growth? Discuss the classification 6 + 5 + 4of virus.
- 7. Define and classify immunity. Describe the type IV hypersensitivity reaction. 8 + 7
- 8. What are the different types of sterilisation procedures ? a) Briefly discuss sterilisation.
  - b) Discuss sterilisation by autoclaving.
  - Name three chemical disinfections. 7 + 5 + 3c)
- 9. a) Discuss viral genome and replication.
  - b) Discuss briefly life cycle of HIV.
  - c) Discuss hepatitis virus. 5 + 6 + 4