

## MICROBIOLOGY

2010

First Paper

Full Marks : 40

**Use Separate answer script for each group**

*Attempt all questions. The figures in the margin indicate distribution of marks in each question.*

### Group – A

1. a) A 23 year old lady, married recently, attended the hospital with the complaints of fever with chills, increasing urinary frequency along with urgency and dysuria, for the past 24 hours.  
 What is the most probable diagnosis? 1  
 What could be the infecting organism? 1  
 What other aetiological agents can be responsible for such presentation? 2  
 How will you proceed to find out the infecting organism in the laboratory? 6  

or

 b) A two-year old girl presented with fever, swelling of neck, pharyngitis and difficulty in deglutition, greenish black membrane in throat is seen on examination.  
 What is the provisional diagnosis? 1  
 What other aetiological agent can be responsible for similar presentation? 2  
 Describe briefly how you will isolate the aetiological agents in the laboratory? 7

### Group - B

2. Write short notes on ( **any three** ) : 3 x 4
  - a) IgL
  - b) Bacterial spores
  - c) Transport media
  - d) Treponema pertenue

### Group - C

3. Comment on ( **any three** ) : 3 x 4
  - a) Well-felix is a heterophil agglutination test.
  - b) Hemophilus ducreyi requires only x-factor
  - c) Anaerobic bacteria do not grow on routinely prepared culture media
  - d) Enterococcus is known for its multidrug resistance

### Group – D

4. 3 x 2
  - a) Chloramphenicol in the treatment of typhoid
  - b) Infection type and toxin type of food poisoning.
  - c) Comment on :- A combination of VDRL and TPHA tests is better than either of them alone for the diagnosis of exclusion of syphilis.