

MICROBIOLOGY**2009****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 45 year lady presented with fever, malaise, weakness and anorexia. She gives a history of tooth extraction few days back. There is past history migratory polyarthritis in late childhood. Clinical examination revealed fever and a systolic cardiac murmur. Name the probable clinical diagnosis and the common etiological agents causing such disease. Briefly discuss the laboratory diagnosis to establish the etiological agent. 1+2+7

or

b) A 25 year man presented in the OPD with a painless, indurated, superficial genital ulcer. The inguinal lymph nodes are swollen, discrete, rubbery and non- tender. He has history of unprotected sexual exposure. What is the provisional diagnosis? Name the causative organism(s) of this case and enumerate other agents causing sexually transmitted infections. Briefly discuss the laboratory diagnosis of the disease described above.

Group - B

2. Write short notes on (**any three**) : 3 x 4
- a) Antiseptic agents for hand hygiene in health care.
 - b) Lg.m
 - c) Type I hypersensitivity
 - d) Plasmids

Group - C

3. Comment on (**any three**) : 3 x 4
- a) Plasmids play a significant role in transmission of drug resistance.
 - b) Urinary tract infections can occur without significant bacteriuria.
 - c) VDRL test may be positive in people without syphilis.
 - d) Some fungi show morphological variety at different temperature.

Group – D

4. Differentiate between : 3 x 2
- a) Exotoxin and Endotoxin.
 - b) TH1 and TH2 immune response.
 - c) Secretory and invasive diarrhea