

The West Bengal University of Health Sciences
M.B.B.S. 2nd Professional Examination, 2014

Subject: Microbiology

Time: 2hrs

Paper: I

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 two year old boy has been brought to the emergency with high fever, vomiting and headache. On physical examination, there was neck rigidity 1+1+5+3
- i) What is your provisional diagnosis?
- ii) What are the causative bacteria in such a case?
- iii) How will you proceed for laboratory diagnosis of this disease?
- iv) What are the vaccines available?

or

b) A 3 year old child presents to the OPD with acute sore throat, dysphagia, salivation and mild fever. On examination, an adherent thick grayish patch is found over the tonsil and oropharynx which bleeds on removal.

- i) What is the clinical condition? 1+1+6+2
- ii) What is the causative bacteria?
- How will you collect the sample and proceed for laboratory diagnosis?
- What is the method of prevention of such infection?

Group - B

2. Write short notes on (**any three**) : 3 x 4
- a) Toxic shock syndrome
- b) Prozone phenomenon
- c) Transport media
- d) Monoclonal antibody

Group - C

3. Comment on (**any three**) : 3 x 4
- a) Result of a single Widal test should be interpreted with caution.
- b) Coagulase negative Staphylococci are never pathogenic
- c) Antimicrobial resistance may be due to several factors
- d) Self antigens are usually non-antigenic, but there are exceptions.

Group – D

4. Differentiate between : 3 x 2
- a) Gram positive and Gram negative bacterial cell wall
- b) Exotoxin and endotoxin
- c) Primary and Secondary immunity