

The West Bengal University of Health Sciences
MBBS 2nd Professional Examination, November 2021

Subject : Microbiology
Paper : I

Full Marks : 40
Time : 2 hours

Attempt all questions. The figures in the margin indicate full marks.

1. a) One young adult male patient was brought to OPD with history of fever for 2 days along with headache, vomiting and convulsion. On examination, there was neck rigidity and Kernig sign positive. 1+3+6
- i) What is the probable clinical diagnosis?
 ii) Name the causative organism responsible for it.
 iii) How will you plan for confirmation of the case in laboratory?

Or

- b) A middle-aged person is suffering from low grade fever for 2 months along with cough and hemoptysis and gradual weight loss. Acid fast bacilli found in the sputum smear examination.
- i) What is your probable diagnosis?
 ii) Name the etiological agents..
 iii) Briefly discuss the procedure adopted in the laboratory for the identification and isolation of AFB from sputum sample. 1+2+4+3
 iv) How the immune status of such a patient can be assessed. 3 x 4
2. Write short notes on **any three** of the following: 3 x 4
- a) Atypical Mycobacteria.
 b) Fimbria.
 c) IgE.
 d) Group B streptococcus.
3. Comments on **any three** of the following: 3 x 4
- a) VDRL positivity does not necessarily mean Treponema pallidum infection.
 b) Blood culture is an important test in diagnosis of Enteric fever.
 c) Sterilization by moist heat may be done at different temperatures.
 d) ELISA can be done in different ways.
4. Differentiate between the following: 3 x 2
- a) Exotoxin and Endotoxin.
 b) Agglutination and precipitation.
 c) Selective and Enrichment media.