

**The West Bengal University of Health Sciences**  
**M.B.B.S. 2<sup>nd</sup> Professional Examination, 2008**

**Subject: Microbiology**  
**Paper: I**

**Time: 2hrs**  
**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 mother of Rh D negative blood group delivered a Rh D positive baby with severe jaundice. She had Rh D positive 1<sup>st</sup> child without any complication of the baby. What immunological reaction is responsible for the jaundice of the baby? Write the mechanism of action of such immunological reaction. Give an example of one immunodiagnostic test based on this type of reaction. Write the principle of this test, in short.

1+4+1+4

or

b) Few days after tooth extraction, a 55 years lady presented with fever, malaise, lethargy and anorexia. She gave a past history of migratory polyarthrititis at 15 years of age. On clinical examination, a systolic murmur was revealed.

Name the probable clinical condition and the common organism causing the present illness? Briefly describe the laboratory diagnosis of the etiology of the present condition.

**Group - B**

2. Write short notes on ( **any three** ) :

3 x 4

- a) Gaseous disinfectants.
- b) Type I hypersensitivity.
- c) Neagler's reaction.
- d) ELISA test.

**Group - C**

3. Comment on ( **any three** ) :

3 x 4

- a) Pulmonary tuberculosis and presence/absence of AFB in sputum smear.
- b) Commensal organisms and their pathogenic potential.
- c) Skin test is more helpful in epidemiology than diagnosis of infection.
- d) Widal test has limited applicability in diagnosis of enteric fever.

**Group – D**

4. Differentiate between :

3 x 2

- a) Immune reactivity and immune tolerance.
- b) CD4+ cells and CD8+ cells.
- c) Commensal and diarrheogenic E.coli.