

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**SECOND EXAMINATION FOR MEDICAL DEGREES (PART 1) –February 2012**  
**MICROBIOLOGY – Paper II**

**Date: 21.02.2012**

**Time : 2 hours**  
**9.00 – 11.00am**

ANSWER ALL FOUR QUESTIONS

1. A 35 year old man presented to the Jaffna Teaching Hospital with fever & headache of 3 days duration. On clinical examination, he was found to have splenomegaly and an eschar on the perineal region.
  - 1.1. What is the most likely diagnosis? ( 10Marks)
  - 1.2. State the etiological agent of this disease ( 10Marks)
  - 1.3. Describe the pathogenesis of this disease ( 35Marks)
  - 1.4. List the laboratory investigations to diagnose this disease. ( 15Marks)
  - 1.5. Mention the treatment of this disease ( 10Marks)
  - 1.6. Describe briefly the prevention of this disease ( 20Marks)
  
2. Explain the pathogenesis of the following infective diseases:
  - 2.1. Gas gangrene ( 35Marks)
  - 2.2. Tuberculosis ( 35Marks)
  - 2.3. Dengue haemorrhagic fever (DHF) ( 30Marks)
  
3. A 40 year old man presented to the STD clinic with urethral discharge
  - 3.1. List the possible causative agents (10 Marks)
  - 3.2. Explain the laboratory tests for confirmation of each of the microorganism mentioned in 3.1 (30 Marks)
  - 3.3. Name the drug of choice and alternative drug for each of the organism mentioned in 3.1 (25 Marks)
  - 3.4. Describe the mode of transmission and preventive measures of AIDS ( 35Marks)

4. 4.1. “Blood culture is better than the SAT for the diagnosis of Typhoid fever”  
Discuss the above statement ( 30Marks)
- 4.2. Briefly compare and contrast the Hepatitis A & B viruses in relation to morphology and transmission ( 20Marks)
- 4.3. Write notes on the following
- 4.3.1. Cryptococcosis (20 Marks)
- 4.3.2. Delayed hypersensitive reaction (30 Marks)