



**RAJARATA UNIVERSITY OF SRI LANKA  
FACULTY OF APPLIED SCIENCES**

**B.Sc. (Special) Degree in Applied Biology  
Fourth Year – Semester I Examination - June/ July 2018**

**MIB 4302 - MEDICAL MICROBIOLOGY**

**Time: Three (03) hours**

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**Answer ALL questions**

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1. A research student has received an aerobic bacterial sample in dry powdered form. Design a procedure to identify this organism and carry out an ABST. **(100 marks)**
2. Describe a diagnostic procedure for cutaneous mycosis. **(100 marks)**
3. A patient has presented with fever, diarrhea and vomiting after a meal out.
  - a) State the possible causal organism, if the doctor suspects enteric fever. **(10 marks)**
  - b) List the types of specimen that should be examined. **(15 marks)**
  - c) Describe the laboratory diagnosis of the pathogen. **(75 marks)**
4. a) An elderly lady is admitted to a hospital with a chronic wound. If the wound swab cultures of this patient results no growth, propose an infection management protocol. Please note that no antibiotics have been given previously and all procedures have been conducted without errors. **(50 marks)**
  - b) If the samples from above (a) results in a mixed growth with beta hemolysis on blood agar, how would you identify the beta hemolytic organism. **(50 marks)**
5. Write an essay on the detection of the emergence of antibiotic resistance in bacteria. **(100 marks)**

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