



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

**Bachelor of Science Honors in Microbiology
Fourth Year Semester I Examination –July/August 2023**

MIB 4204 – MICROBIAL TAXONOMY

Time: Two (2) hours

Answer ALL questions

1. a) Describe the following terms and their importance in taxonomy:
 - i) Polyphasic approach
 - ii) Holotype
 - iii) Herbarium
 - iv) Culture collection
 - v) Ex-type **(60 marks)**

- b) What are the important approaches in describing a species in modern mycology? **(40 marks)**

2. Describe the following terms and importance in nomenclature
 - a) One fungus one name
 - b) Dual nomenclature system
 - c) Pleomorphism
 - d) International code of algae, fungi and plants **(100 marks)**

3. a) What are the main differences between fungi and fungus-like taxa and provide important phyla (two phyla for each) in each group **(50 marks)**

- b) List and describe the main characters use in taxonomy of asexual fungi and discuss about their important components in classification? **(50 marks)**

4. Describe the key features and specific microbiological tests which could be used to differentiate *Escherichia*, *Bacillus*, and *Mycobacterium*. **(100 marks)**

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