



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Science
First Year – Semester II Examination – October/ November 2017

BIO 1205 – PLANT DIVERSITY II (Old Syllabus)

Time: Two (02) hours

Answer four (04) questions including question no. 01.

1. a) Differentiate the fertile region of *Lygodium* sp. from that of *Osmunda* sp. (22 marks)
- b) i. Explain briefly, how you would distinguish a typical leafy liverwort from a typical moss in the field. (18 marks)
- ii. Name three cycadophytes and three coniferophytes that you studied at the Royal Botanic Gardens, Peradeniya. (18 marks)
- iii. State five (05) economic/ ecological importance of bryophytes. (15 marks)
- c) List three (03) features common to members of the order Ophioglossales. (15 marks)
- d) State three (03) xerophytic characters present in coniferophytes. (12 marks)
2. Describe briefly, the vegetative diversity found in the gametophyte of thalloid members in the Division Marchantiophyta (Hepatophyta). (100 marks)
3. a) “*Gnetum* is considered as the ancestor of pro-angiosperms”. Justify this statement. (80 marks)
- b) Give five (05) economic importance of gymnosperms. (20 marks)
4. a) Differentiate between strobilus of *Equisetum* sp. from that of *Selaginella* sp. (70 marks)
- b) What is the major difference between the sorus of *Angiopteris* sp. and that of *Marattia* sp. Support your answer with an appropriate diagram. (30 marks)
5. a) Describe briefly the diversity found in the megasporophyll of Cycadophytes. (40 marks)
- b) Why are plants referred to as embryophytes? (10 marks)
- c) “Sporophyte of a *Anthoceros* sp. is adapted to terrestrial life” Justify the statement using four features. (50 marks)

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