



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

**B.Sc. (General) Degree in Applied Sciences
Third year – Semester II Examination - February/March 2019**

BIO 3206– DEVELOPMENT VS ENVIRONMENT

Time: Two (02) hours

Answer FOUR (04) questions only.

1. Discuss the relative merits of *Environmental Impact Assessment* and *Strategic Environmental Assessment* in terms of protecting the environment. **(100 marks)**

2. Describe the concept of sustainable development and discuss some of the key issues that are essential in such a process. **(100 marks)**

3. Moragahakanda project is the last irrigation project within the Mahaweli project in Sri Lanka.
 - a) Outline the major advantages and disadvantages in this project. **(30 marks)**
 - b) Discuss the economic impacts of constructing reservoirs under the Mahaweli project in Sri Lanka. **(70 marks)**

4. a) Define the terms “Gross Domestic Product” and “Gini Index”. **(10 marks)**
 - b) Explain the importance of using travel cost method in relation to valuing environment resources. **(25 marks)**
 - c) Fiji is a small island nation. Its population total is 400, and it has 100 wage earners who earn an average of \$60 per year. Each wage earner spends \$30 per year buying local goods and services and \$2.50 buying imported items. The island exports a total of \$800 worth of goods. The Government tax rate is 10% and all government money is spent on building infrastructure and supporting schools. There is only one industry (uranium mining) on the island and it employs every wage earner. The industry spends \$600 each year on new mining equipment. What is the GDP? **(65 marks)**

5. Write short notes on the following;

- a) cost benefit analysis for evaluation of a project
- b) five methods of calculation of National Income
- c) community based organizations (CBOs).
- d) Human Development Index

(25x 4 marks)

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