



98

RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Health Promotion
Third year – Semester II Examination - October/November 2017

BIO 3206– DEVELOPMENT VS ENVIRONMENT

Time: Two (02) hours

Answer any four (04) questions only.

1. Discuss the relative merits of *Environmental Impact Assessment* and *Strategic Environmental Assessment* in terms of protecting the environment. (25 marks)
2. Describe the concept of sustainable development and discuss some of the key issues that are essential in such a process. (25 marks)
3. Moragahakanda and Kalu Ganga projects are last irrigation projects that have been planned within the Mahaweli project in Sri Lanka. It will involve relocation of 6000 families from three effected traditional people village and will be irrigated 82000 ha. As the project is economically driven rather than environmentally acceptable, the environmental pressure groups are working against project approval. According to environmental laws, an EIA needs to be carried out within three months to prove that the project will be beneficial if the mitigatory measures are adapted. However, to have good monitoring mechanisms, the impacts should be properly predicted.
Based on this information answer the following questions.
 - a) State main advantages of these two projects to Sri Lanka. (06 marks)
 - b) Highlighting the special management measure, briefly discuss the way in which they should be adopted by the authorities in resettling villagers. (09 marks)
 - c) Explain the major environmental problems caused by these two projects and discuss mitigatory measures that can be adopted to overcome these problems. (11 marks)
4.
 - a) Define the terms “Gross Domestic Product” and “Gini Index”. (05 marks)
 - b) Explain the importance of using travel cost method in relation to valuing environment resources. (08marks)

- 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? (12 marks)

5. Write short notes on any **two (02)** of the following;

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

(25 marks)

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