

UNIVERSITY OF COLOMBO, SRI LANKA
FACULTY OF GRADUATE STUDIES
Postgraduate Diploma in Environment Management 2017/2018
Semester II Examination
PgDEM 5308 - Economic Valuation Techniques for Environment

(Time – 03 Hours)

Answer any **FOUR (04)** questions only.

(1) National Resources and Environment Projects - identification to beyond execution undergo various stages in project cycle.

- (a) Draw the project cycle and explain the various stages of project cycle (8 marks)
- (b) Distinguish environmental project feasibility from project appraisal (5 marks)
- (c) Discuss various types of feasibility studies for environmental projects ? (12 marks)

(2) Cost-benefit analysis is a useful tool to assess the viability of the project

- (a) Examine the difference between financial analysis and economic analysis and explain the various techniques in cost-benefit analysis (12 marks)
- (b) Extended Cost-benefit analysis aims to include social-environmental costs and benefit into the economic analysis. Explain this statement with environmental valuation methods and with illustrative examples ? (13 marks)

(3) Sustainable Development Goals (SDGs) focus on Post 2015 development agenda and is being incorporated into the National Development Framework.

- (a) Explain the importance of Sustainable Development Goals (SDGs) and examine the salient aspects of the Goals (10 marks)
- (b) Planet is considered as an important focus area in the SDGs. Explain the planet related goals, targets and Key Performance Indicators (KPIs) - (15 marks)

(4)

- (a) Examine the relationship between economics and environment using the Material Balance Model. (10 marks)
- (b) Explain how environmental problems emerge in the above model and the remedial measures to reduce such problems. (15 marks)

(5)

- (a) What is meant by market failure? How do you explain environmental issues as market failure? (10 marks)
- (b) Explain the efficiency criteria. Do you think direct command and control approach to pollution control yields efficient outcome? Explain your answer. (15 marks)

(6)

- (a) Explain the concept of Total Economic Value (TEV) and how it is derived. (10 marks)
- (b) Discuss various methods of calculating the value of environmental resources. (15 marks)

(7)

- (a) Explain how the market approach seeks solutions for environmental problems. (10 marks)
- (b) Discuss the impact of a pollution tax, an environmental subsidy and a pollution permit trading system as a solution to environmental pollution. (15 marks)