



UNIVERSITY OF COLOMBO, SRI LANKA
FACULTY OF MANAGEMENT AND FINANCE
POSTGRADUATE AND MID-CAREER DEVELOPMENT UNIT

MBA Weekday/Weekend Programme (2022-2024)

Trimester VI Examination – February 2025

MBA 5223/ MBAAI 5245 – Environmental Management

Three (03) Hours

There are **seven (07)** questions printed on **two (02)** pages.

Answer **five (05)** questions ONLY.

Where additional questions are attempted, only the questions attempted first will be evaluated. Illustrate your answers with appropriate diagrams where necessary.

This is an **open book** examination.

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01. Discuss the major ecological impacts associated with the primary, secondary, tertiary, and quaternary industry sectors that contribute to the tourism industry in Sri Lanka.

(20 marks)

02. a) Briefly describe the major factors to consider in designing an oil trap.

(08 marks)

- b) Discuss how aerobic and anaerobic tanks in a wastewater treatment plant must be managed to improve treatment efficiency.

(12 marks)

(Total 20 marks)

03. a) Briefly discuss the key reasons for food waste in the hotel industry and how they can be addressed.

(05 marks)

- b) Prepare a plan to implement cleaner production strategies to reduce food waste in a restaurant.

(15 marks)

(Total 20 marks)

04. a) Describe energy-efficient technologies/practices the apparel industry could adopt to reduce energy consumption.

(15 marks)

- b) What data would you gather to prepare an energy-saving plan for the apparel sector, and how would you use it to ensure ongoing improvement?

(05 marks)

(Total 20 marks)

05. Ceylon Electricity Board (CEB) proposes constructing a hydropower dam on a river that flows through a region rich in biodiversity. Environmental groups warn of potential impacts on aquatic species, groundwater levels, sediment flow, and local communities.

- a) Critically evaluate the key components that should be included in the Terms of Reference (ToR) of the EIA report for this project.

(10 marks)

- b) Propose a mitigation plan to address five possible negative environmental impacts that can result due to this project.

(10 marks)

(Total 20 marks)

06. As indicated in its environmental policy, a retail company has decided to eliminate single-use plastic packaging from its product line and replace it with biodegradable or recyclable alternatives.

a) Describe two strategies that can be adopted to increase employee engagement when implementing the company's environment policy.

(10 marks)

b) Discuss the environmental benefits and challenges of shifting from single-use plastics to biodegradable or recyclable packaging materials.

(10 marks)

(Total 20 marks)

07. A plastic toy manufacturing company is implementing ISO 14001 to reduce its significant environmental impacts including: high oil consumption, noise and plastic waste generation.

a) Describe a procedure that could be used to prepare the Aspect-Impact Register for this company.

(10 marks)

b) Explain how the PDCA cycle can be applied to develop and implement plastic-saving initiatives within the company's Environmental Management System (EMS).

(10 marks)

(Total 20 marks)
