

THE OPEN UNIVERSITY OF SRI LANKA
B.SC. HONOURS (IT) DEGREE PROGRAMME – 2024/2025
FINAL EXAMINATION
ISU5301 – INDUSTRY SUSTAINABILITY AND LAW
DURATION: TWO HOURS ONLY (02 HOURS)



Date: 10.11.2025

Time: 09.30 a.m. – 11.30 a.m.

Answer any **FOUR** Questions **ONLY**.

Question 01

- a) Define **Industry Sustainability** and explain its importance. [03 Marks]
- b) Identify and explain the **three (03) pillars of sustainability** in the IT industry. [05 Marks]
- c) Discuss how sustainability supports **innovation and competitiveness** in IT. [04 Marks]
- d) Explain the meaning and importance of **Industry Law** in the IT sector. [04 Marks]
- e) Describe **three (03) key legal principles** relevant to IT operations. [05 Marks]
- f) Analyze the **future trends and challenges** expected in industry law. [04 Marks]

Question 02

- a) Explain the **cultural impacts** of IT decisions on modern society. [04 Marks]
- b) Discuss two major **environmental impacts** caused by IT operations. [04 Marks]
- c) How do **organizational policies** contribute to sustainable IT practices? [04 Marks]
- d) Explain the concept of **economic viability** in IT projects. [04 Marks]
- e) Assess the **global environmental and social effects** of e-waste. [05 Marks]
- f) Suggest two **practical strategies** for managing e-waste responsibly. [04 Marks]

Question 03

- a) Explain how **algorithm design** can influence energy consumption. [04 Marks]
- b) Describe how **operating systems** can reduce energy waste in computing. [04 Marks]
- c) Evaluate the **environmental role of networks** in data transmission. [04 Marks]
- d) Explain how **database design** affects sustainability. [04 Marks]
- e) Discuss how **Human-Computer Interaction (HCI)** impacts the environmental footprint of IT systems. [05 Marks]

- f) Recommend two (02) **sustainable computing practices** that IT users can adopt. [04 Marks]

Question 04

- a) Define **sustainable design standards** and explain their relevance to IT. [04 Marks]
- b) Describe any **four (04) key principles** of sustainable design with examples. [04 Marks]
- c) Discuss the **benefits and challenges of telecommuting** in relation to sustainability. [04 Marks]
- d) Analyze the **environmental implications of web shopping**. [04 Marks]
- e) Explain how **pervasive computing technologies** (e.g., smart energy systems, social networking) promote sustainability. [05 Marks]
- f) Discuss the role of **environmental monitoring and citizen science** in Sri Lanka's sustainability goals. [04 Marks]

Question 05

- a) Explain how **organizational culture** influences software sustainability. [04 Marks]
- b) Discuss the impact of **government policies** on sustainable IT practices. [04 Marks]
- c) Describe the importance of **green software legislation and ISO/IEC standards**. [04 Marks]
- d) Analyze the **interdependence between social systems and software systems**. [04 Marks]
- e) Provide an example of a **successful sustainable IT initiative** in the industry. [04 Marks]
- f) Suggest two (02) **recommendations** to strengthen sustainability through IT policy. [05 Marks]

Question 06

- a) Define **entrepreneurship** and explain its importance in sustainable economic growth. [04 Marks]
- b) List and describe **key characteristics and skills** of a successful entrepreneur. [04 Marks]
- c) Explain the **process of identifying entrepreneurial opportunities** in the IT sector. [04 marks]
- d) Discuss how the **business environment** affects entrepreneurial success. [04 Marks]
- e) Evaluate the **role of entrepreneurship** in promoting sustainable industry development. [05 Marks]
- f) Suggest two **ways innovation contributes** to a sustainable enterprise. [04 Marks]