



**SIR ARTHUR LEWIS COMMUNITY COLLEGE
ACADEMIC YEAR (2024/2025) - SEMESTER TWO
END OF SEMESTER EXAMINATION**

COURSE CODE : SOC401
COURSE TITLE : SUSTAINABLE SOCIETAL SYSTEM
LECTURER(S) : Tasha Saiwak-William
DATE : May 6, 2025
TIME : 9 p.m.
DURATION : 2 Hours
STUDENT ID # : _____

GENERAL INFORMATION AND INSTRUCTIONS

- Students must sign **IN** and **OUT** on the examination class list.
- Write your ID number on the question paper

Instructions:

1. This paper consists of **Two (2) Sections**.
2. **Section A** consists of Thirty (30) Multiple Choice Questions.
3. **Section B** Short Answer Questions.
4. Write your ID Number on each answer sheet.
5. Please number your responses accurately.
6. Answer **ALL** questions.

SECTION A - MULTIPLE CHOICE

Instructions

1. This Section consists of thirty (30) Multiple Choice Questions.
2. **Read** each question carefully. **Select** the correct answer on the answer sheet provided.

1. Which of the following is NOT a primary challenge related to environmental sustainability?
 - A) Climate change
 - B) Technological advancements
 - C) Deforestation
 - D) Over Population
2. What is the relationship between social equity and sustainability?
 - A) They are completely unrelated concepts
 - B) Social equity enhances sustainability by ensuring that all groups have access to resources
 - C) Sustainability leads to social inequity by prioritizing environmental concerns over social ones
 - D) Achieving social equity is unnecessary for sustainable development
3. This type of sustainability scale measures the change in a variable overtime:
 - A) Temporal
 - B) Jurisdictional
 - C) Spatial
 - D) Institutional
4. This type of scale measure different geographical levels at which sustainability can be assessed, planned, and implemented:
 - A) Institutional
 - B) Temporal
 - C) Spatial
 - D) Jurisdictional
5. Which cross-cutting issue focuses on the social aspects of sustainability, including equity, access, and justice?
 - A) Environmental sustainability
 - B) Political sustainability
 - C) Economic sustainability
 - D) Social sustainability
6. What is a Social-Ecological System?
 - A) A system that integrates human societies and ecological systems
 - B) A system that focuses solely on economic growth
 - C) A system that ignores human impacts on the environment
 - D) A system focused on technological solutions only
7. Which framework is commonly used to analyze Social-Ecological Systems?
 - A) SWOT Analysis
 - B) The SES Framework by Ostrom
 - C) The Commons Framework
 - D) Driver-Pressure-State-Impact- Response Framework

8. Which of the following is NOT a category of ecosystem services?
 - A) Provisioning services
 - B) Regulating services
 - C) Cultural services
 - D) Destruction services

9. What is an example of a provisioning service?
 - A) Pollination of crops
 - B) Drinking water
 - C) Carbon sequestration
 - D) Natural beauty

10. Which ecosystem service helps to mitigate climate change by absorbing carbon dioxide?
 - A) Cultural services
 - B) Supporting services
 - C) Regulating services
 - D) Provisioning services

11. Which of the following activities could be considered a cultural ecosystem service?
 - A) Fisheries management
 - B) Recreational activities in nature
 - C) Water purification
 - D) Soil formation

12. Which valuation approach estimates the value of ecosystem services based on direct market prices?
 - A) Travel cost method
 - B) Market price valuation
 - C) Hedonic pricing
 - D) Benefit transfer method

13. Which of the following practices is NOT commonly associated with ecosystem-based management?
 - A) Protected area establishment
 - B) Restoration of degraded habitats
 - C) Over-exploitation of resources
 - D) Sustainable land-use planning

14. Which is an example of an ecosystem-based adaptation strategy?
 - A) Building seawalls along coastlines
 - B) Reforesting areas to improve water retention and reduce flooding
 - C) Implementing strict fishing quotas
 - D) Increasing fossil fuel production

15. All of the following are challenges encountered when implementing ecosystem-based management systems EXCEPT:
 - A) Conflicts between different stakeholders' interests
 - B) Data gaps
 - C) Long-term commitment
 - D) Sustainable resource management

16. What does "Drivers" refer to in the Driver-Pressure-State-Impact- Response framework?
 - A) The environmental pressures exerted by human activities
 - B) The socio-economic and environmental factors influencing changes in the environment
 - C) The actions taken to respond to environmental issues
 - D) The condition of the environment at a given time

17. Which component of the DPSIR framework focuses on the effects of environmental changes on health and biodiversity?
 - A) Impact
 - B) Drivers
 - C) Pressures
 - D) State

18. Game theory models are useful in studying social-ecological systems because they:
 - A) Simplify complex ecological data
 - B) Help understand interactions and strategies among competing stakeholders
 - C) Focus solely on economic factors impacting ecosystems
 - D) Assess the long-term ecological impacts of climate change

19. What is the primary purpose of the Delta Dynamic Integrated Emulator Model?
 - A) To estimate the financial returns on investments in sustainability
 - B) To model the behavior of individual species within ecosystems
 - C) To simulate interactions between environmental and socio-economic variables
 - D) To catalogue the existing biodiversity in a region

20. Which of the following agreements specifically addresses the phase-out of substances harmful to the ozone layer?
 - A) Convention on Biological Diversity
 - B) St. George's Declaration
 - C) Montreal Protocol
 - D) Cartagena Convention

21. The Cartagena Convention is designed to protect which of the following?
 - A) Biodiversity in marine and terrestrial ecosystems
 - B) The Caribbean Sea from pollution
 - C) The ozone layer from depletion
 - D) Global forest resources

22. Which of the following is a major sustainability challenge faced by Small Island Developing States (SIDS)?
 - A) Abundant freshwater resources
 - B) High levels of industrialization
 - C) Vulnerability to climate change and natural disasters
 - D) Overpopulation

23. Which of the following is NOT one of the five Ps outlined in the UN Sustainable Development Framework?
 - A) People
 - B) Power
 - C) Planet
 - D) Prosperity

24. What is the primary rationale for conducting sustainability assessments?
 - A) To increase profits at any cost
 - B) To comply with local regulations only
 - C) To promote consumerism and economic growth
 - D) To evaluate environmental, social, and economic impacts

25. Which of the following is a common application of sustainability assessments?
 - A) Product cost analysis
 - B) Risk management
 - C) Employee performance reviews
 - D) Urban planning and development

26. Which of the following methods is NOT the best practice for data collection in sustainability assessments?
- A) Ignoring stakeholder feedback
 - B) Utilizing diverse data sources
 - C) Ensuring data accuracy and reliability
 - D) Conducting regular data reviews
27. What are the main objectives of Life Cycle Sustainability Assessment (LCSA)?
- A) To evaluate the initial cost of production
 - B) To assess the environmental, economic, and social impacts of a product throughout its life cycle
 - C) To compare the marketability of different products
 - D) To determine the shelf-life of a product
28. Which of the following is NOT a typical tool used in the Life Cycle Sustainability Assessment process?
- A) Life Cycle Assessment (LCA)
 - B) Social Life Cycle Assessment (SLCA)
 - C) Cost-Benefit Analysis
 - D) Life Cycle Costing (LCC)
29. One notable disadvantage of Environmental and Social Impact Assessment (ESIA) is:
- A) Its ability to effectively identify all potential impacts
 - B) It can cover every aspect of sustainability comprehensively
 - C) It is inexpensive and requires limited resources
 - D) The engagement of stakeholders can be time-consuming and may lead to conflicts
30. What is one of the key advantages of Multicriteria Decision Analysis (MCDA)?
- A) It uses only quantitative data to make decisions
 - B) It allows for the comparison of diverse criteria across different scenarios
 - C) It is a straightforward process that requires little input
 - D) It focuses only on environmental impacts

SECTION B – SHORT ANSWER

Instructions:

1. This section contains four (4) questions.
2. Answer any **TWO (2)** of the following questions.
3. Each question is worth **25 Marks**.

Question One

- (a) Explain any **TWO (2)** roles cross-sectoral linkages play in facilitating a transformative shift toward sustainability?

(10 Marks)

- (b) Evaluate how collaboration across sectors such as energy, transport, agriculture and urban planning can create synergistic benefits that address complex sustainability issues.

(15 Marks)

Question Two

- (a) Analyze the importance of valuing ecosystem services in the context of policymaking and ecosystem-based approaches. **(10 Marks)**
- (b) Discuss how financial and non-financial measures of these services inform sustainable development and climate change mitigation strategies? **(15 Marks)**

Question Three

- (a) Explain the role of governance at any **TWO (2)** levels (**local, national or international**) in fostering a policy environment conducive to sustainable development. **(10 Marks)**
- (b) Discuss how governance structures can be improved to enhance sustainability outcomes. **(15 Marks)**

Question Four

- (a) Explain the role of sustainability assessments in local government policy planning. **(10 Marks)**
- (b) Compare and contrast the Life Cycle Assessment (LCA) and the Environmental and Social Impact Assessment (ESIA) sustainability assessment framework and discuss their applications in various sectors. **(15 Marks)**

END OF EXAMINATION