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**UNIVERSITY OF SWAZILAND**  
**FACULTY OF HEALTH SCIENCES**  
**DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE**

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**FINAL EXAMINATION**

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TITLE OF PAPER	ENVIRONMENTAL MANAGEMENT
COURSE CODE	EHS331
DURATION	TWO (2) HOURS
DATE	NOVEMBER/DECEMBER 2019
TOTAL NUMBER OF MARKS	100
INSTRUCTIONS	<ol style="list-style-type: none"><li>1. DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED TO DO SO.</li><li>2. ANSWER ANY FOUR QUESTIONS.</li><li>3. BEGIN YOUR ANSWERS TO EACH QUESTION ON A FRESH PAGE. ENSURE THAT ALL ANSWER SHEETS ARE NUMBERED CORRECTLY.</li><li>4. POOR HANDWRITING AND CARELESSNESS IN ENGLISH LANGUAGE GRAMMAR SHALL RESULT IN LOSS OF MARKS.</li><li>5. ANY FORM OF MISCONDUCT DURING THE EXAMINATION IS PUNISHABLE IN LINE WITH RELEVANT ACADEMIC REGULATIONS.</li></ol>

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**QUESTION ONE [25 MARKS]**

1. Since prehistory, humankind has accumulated environmental know-how and developed strategies for exploiting nature. To help regulate and sustain resource use, people often;
  - (a) Organised conferences to learn more about the environment
  - (b) Evolved taboos
  - (c) Established institutions that deal with the environment, such as the Swaziland Environment Authority
  - (d) Conducted surveys
2. One of the developments that appeared in the late twentieth century, which made it clear that environmental management must be adopted include;
  - (a) Climate change
  - (b) Acid deposition
  - (c) Ozone depletion
  - (d) Population growth
3. One of the research institutes involved in environmental management is;
  - (a) Worldwatch Institute
  - (b) UNEP
  - (c) World Bank
  - (d) USAID
4. One of the factors that motivate environmental management do not include;
  - (a) Desire to save costs
  - (b) Pragmatic reasons
  - (c) Response to poverty
  - (d) Compliance
5. In the 'tragedy of the commons' essay, it was argued that commonly owned natural resources under conditions of population growth would be damaged because each user would seek to maximise their short-term interests. This was a belief of;
  - (a) The Limits to Growth
  - (b) Beyond the Limits to Growth
  - (c) Neo-Malthusians
  - (d) The Club of Rome
6. The thesis that population increase invariably causes environmental degradation and poverty is now;
  - (a) Largely dismissed
  - (b) A firm belief of many reputable environmental managers
  - (c) A strong focus area in the sustainable development agenda in many countries
  - (d) The main course of the major environmental problems in Africa
7. The Club of Rome was;
  - (a) A group of ecologists, systems analysts, demographers and environmentalists
  - (b) An informal international group concerned about the predicament of humanity
  - (c) A United Nations agency that was tasked to spearhead the promotion of sustainable development agenda in the world
  - (d) A group of industrial revolutionists that was totally against the idea that human population growth might be linked with environmental damage

8. If present growth trends continue unchanged, the limits to growth on this planet will be reached by 2072. This was proposed by;
  - (a) The Brundtland Report
  - (b) Neo-Malthusians
  - (c) Thomas Malthus
  - (d) The Limits to Growth
9. One of the approaches towards understanding implications of population growth was the use of a computer model in trying to determine future scenarios. This was the approach of;
  - (a) Thomas Malthus
  - (b) The Club of Rome
  - (c) The World Commission on Environment and Development, 1987
  - (d) Spaceship Earth theory
10. Environmental management seeks to steer the development process to;
  - (a) Ensure higher economic growth
  - (b) Eradicate poverty
  - (c) Ensure equal opportunities
  - (d) Take advantage of opportunities
11. Environmental management is a process concerned with;
  - (a) Human–environment interactions
  - (b) Stoppage of climate change problems
  - (c) The major problems affecting the world in this century
  - (d) Sustainable development
12. Consider the following statements; seeks to identify what is environmentally desirable; seeks to identify what are the physical, economic, social and technological constraints to achieving that; seeks to identify and what are the most feasible options. These are characteristics of;
  - (a) Sustainable development
  - (b) The Malthusian theory
  - (c) Environmental management
  - (d) The neo-Malthusian theory
13. Few now question the importance of caring for the environment; but in reality the world's governments often;
  - (a) Do not understand the role of environmental management
  - (b) Do not have trained specialists in environmental management
  - (c) Refuse to spend
  - (d) Think environmental management is not necessary
14. One of the bodies that have observed that a crisis has been reached, and that there is limited time available for humans to get environmental management right and avert disaster is;
  - (a) World Commission on Environment and Development
  - (b) World Health Organisation
  - (c) United Nations Children's Fund
  - (d) World Commission on Sustainable Energy (WCSE)
15. For much of the history of the Western nations' struggle to develop there was strong support for;
  - (a) Development management interventions rather than Laissez-faire
  - (b) Weak sustainable development
  - (c) Strong sustainable development
  - (d) Laissez-faire, rather than development management interventions

16. Environmental managers make deliberate efforts to steer the development process to;
  - (a) Exploit environmental resources
  - (b) Argue against ideas that a crisis has been reached
  - (c) Take advantage of opportunities
  - (d) To demonstrate that a crisis has been reached
17. One of the objectives of environmental managers is to mitigate environmental problems. This means;
  - (a) Ensuring that environmental problems never occur
  - (b) Making environmental problems less severe
  - (c) Ensuring that developers that cause environmental problems are prosecuted
  - (d) Predicting environmental problems
18. At the time of the UN Conference on the Human Environment, Stockholm (1972);
  - (a) Many countries had environmental ministries
  - (b) No country had an environmental ministry
  - (c) All countries had environmental ministries
  - (d) Few countries had environmental ministries
19. One of the major developments that encouraged governments and other bodies to seek sustainable development and progress environmental was;
  - (a) The release of Agenda 21
  - (b) The release of Agenda 22
  - (c) The release of Agenda 23
  - (d) The release of Agenda 24
20. Before significant developments proceed, most countries now require;
  - (a) Sufficient funding to ensure that projects are a success
  - (b) An adequate workforce
  - (c) Impact assessments
  - (d) Proof of benefits to local communities
21. Recently, the focus of environmental management has been more on;
  - (a) How the environment affects humans
  - (b) How humans affect the environment
  - (c) On natural resource protection
  - (d) Formulation and implementation of laws
22. One of the tasks of environmental management is to offer carefully weighed warnings in a persuasive manner. This demands sound judgemental, negotiating and diplomatic skills and an ability to take risks and survive. Should a problem flagged by environmental managers not materialise;
  - (a) Environmental managers may be branded 'Cassandras'
  - (b) There may be Laissez-faire
  - (c) Environmental managers may be jailed
  - (d) There may be accusations of 'crying wolf'
23. Few now question the importance of caring for the environment; but in reality the world's governments often;
  - (a) Refuse to spend
  - (b) Do not understand the role of environmental management
  - (c) Do not have trained specialists in environmental management
  - (d) Think environmental management is not necessary

24. When environmental management first appeared in the 1970s, it was applied in largely;
  - (a) Bottom-up manner
  - (b) Participatory manner
  - (c) Top-down manner
  - (d) In the hands of both the state and affected communities
25. At its appearance in the 1970s, environmental management was;
  - (a) An educational tool to change people's perception of the environment
  - (b) A problem-solving field
  - (c) A tool to advocate for changes in attitudes (towards better environmental care)
  - (d) Seen as stumbling block to development

### QUESTION TWO [25 MARKS]

1. In the past, a number of theories about the relationships between population growth and environmental conditions began to emerge. Describe any four such theories, showing clearly the positive and/or negative relationships between population growth and environmental conditions [20].
2. Prior to the development of the four theories that you have described in question one (1) above, there are a number of observations that were made about environmental conditions. State any five such conditions [5].

### QUESTION THREE [25 MARKS]

1. You are employed as a Student Recruitment Officer working for the Department of Environmental Health Science, at UNESWA. One of your tasks this week, during one of the orientation sessions, is to recruit as many students as possible to the environmental management course. In not more than five sentences, what will you tell these students? [10]
2. Attitudes towards environmental management during 1970s-1990s and just 20 years ago are very different. Describe the manner in which environmental management was perceived at these two periods;
  - (a) During 1970s-1990s [5].
  - (b) The past 20 years [5].
3. State any five key factors that prompted the need to get environmental management right in the late twentieth century [5].

### QUESTION FOUR [25 MARKS]

1. For the past five decades, the leadership of the Ministry of Environment in Swaziland has been in the hands of male politicians. The main argument for this position has always been the fact that women know nothing about environmental issues. You are of the view that a female minister can also do a good job. What evidence can you use to support your position? [12]
2. There has been a growth of interest in the role of women in development and environmental management, and consequently, a lot of literature has been produced since 1975. Describe any three broad categories of this literature [6].
3. Consider this statement: "women are relatively more adversely affected by environmental degradation". Describe any three reasons for either agreeing or disagreeing with the statement [7].

**QUESTION FIVE [25 MARKS]**

1. In an attempt to unpack the sustainable development concept in 1965, US Ambassador to the UN, Adlai Stevenson, popularised the catch phrase Spaceship Earth. Briefly explain this concept [5].
2. Define sustainable development according to the World Commission on Environment and Development (1987) [2].
3. What are the two principles that are found in most of the definitions of sustainable development? [2].
4. Environmental economists often split sustainable development into two extremes. State the two extremes [2].
5. For each of the two extremes you have stated above, describe any two principles associated with it [8].
6. What are the three main goals of sustainable development? [3]
7. There has been no shortage of international meetings, agencies and NGOs promoting sustainable development since 1990. State any three examples of meetings and/or agencies that have worked to promote sustainable development over the years [3].