



THE OPEN UNIVERSITY OF SRI LANKA

BACHELOR OF TECHNOLOGY – LEVEL 05

FINAL EXAMINATION – 2007

MPJ5233 – TECHNOLOGY, SOCIETY & ENVIRONMENT

DURATION: FOUR HOURS (ESSAY TYPE PAPER)

OPEN BOOK EXAMINATION

107

Date: 24th April 2008

Time: 09.30 hr. - 13.30 hr.

The questions are grouped in the following manner:

Part A : Q1 – Q4

Part B : Q5 – Q9

Part C : Q10



Mark your Index Number and the Part you are answering on answer book.

Please answer a total of six questions, choosing not more than three from any single part. Do not use more than 300 words to answer any question.

Please do not copy directly from a text. If you have to quote, please do so within inverted commas.

Part A

1. Why has the world become interested in Renewable resources? What special characteristics make it particularly attractive? Give two examples of Renewable resources.
2. Describe the second Law of Thermodynamics and how is it linked to disorder?
3. Explain as to why one could consider costs as being a matter of perception, Use the different methods such as the IRR, NPV and Pay back methods with a single example to explain your point of view.
4. What type of health problems could develop from the constant use of mobile phones? What type of precautions could you take to minimize the potential health hazards of mobile phone usage?

Cont/

Part B

5. a) Explain the interaction between biotic and abiotic components of an Ecosystem with examples.
b) Critically evaluate why we consider cycling of material within an ecosystem as an important phenomenon.
c) What is the significance of Stratospheric Ozone layer in the atmosphere?
6. a) Sri Lanka supposedly has large oil resources recently in the western coastal zone. How could this affect the coastal and marine environment?
b) "Conservation is always better than pollution" Analyze as to why this is so.
7. a) Discuss the impact on visual environment due to a Garbage heap near a bus-halt in an Urban city.
b) What are the measures that you could recommend at household level to address the Garbage problem?
d) What societal problems are associated with garbage disposal?
e) Recommend alternatives for reducing the waste we generate
8. National Environmental Act (NEA) was introduced and amended in several years of Sri Lankan history. Discuss the implications of NEA on protection and management of the environment in Sri Lanka.
9. a) What is the Legal body / Institution under NEA to implement Environmental Impact Assessment (EIA) procedure in Sri Lanka
b) Briefly explain the objectives of carrying out an EIA process.
c) In which step of the EIA process, the Terms of Reference (TOR) is prepared. And who will be benefited by preparing a TOR in an EIA study?

Part C

10. Give reasons as to why only Nuclear Engineers cannot comment on Nuclear Power, or Workers comment on Trade Unionism.