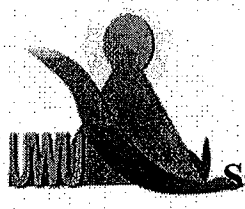
01 - 02



Uva Wellassa University, Sri Lanka

End Semester Examination 2007/2008 - Semester II

SCT 101-3 Biology, Chemistry and Environmental Science

Answer Six (6) questions only
(Part A-Three questions
Part B-Three questions)

Time: Three (03) Hours

PART- A

Answer any three (3) questions

1. (a) What is the purpose of Environmental Assessment before initiating a project? How it helps project proponent to take a correct decision?

(b) Discuss the preliminary information needed to commence EIA or IEE

(c) Discuss the differences between EIA and IEE providing for its relevant examples from Sri Lanka?

2. (a) Explain how the biological diversity of a country is beneficial to economy?

(b) What is value addition? Imaging you are an entrepreneur of a herbal company. Discuss economically viable method for exporting medicinal plants?

3. DAMRO is a leading furniture exporting company in Sri Lanka. Imagine that you the Production Manager. The raw materials for furniture production collected from natural forests. Felling trees and collecting forest products are limited by government because many trees were included in the Red List that affects furniture production. As Production Manager commence a project proposal suggesting alternative paths to enhance furniture production.

4. Write short notes on the followings;

(a) Genetically transmitted disease

(b) Eutrophication

(c) Blood transfusion

(d) CITIES

PART - B

Answer any three (3) questions

5. (a) List elements in the active series of metals

(b) Why iron metal is getting corroded when exposed to atmosphere? What are the essential components for metallic iron corrosion?

(c) Why the metals as gold or silver are inert? Use the position of these metals in the activity series to explain.

6. (a) Differentiate between distilled water and mineralized water.

(b) Why the pH of distilled water is always less than 7? There is a facial cream traded as pH 5.5. What is the significance of this trade mark?

(c) List two ions that received by humans from drinking water?

(d) Write short note on the following topics:

I. Anthropogenic pollution II Green house effect
III. Ozone

7. Almost all the resources required to sustain human life are extracted from the earth.

(a) Why most of the earth resources are considered as nonrenewable?

(b) Name the value added products from the list given below.

I. Water II.Apatite III. Feldspar IV. Graphite V. Quartz

VI. Granite VII. Rutile VIII Gneisse IX. Dolomite X. Inland Corals

(c) Western and southwestern offshore areas of Sri Lanka have a high potential for occurrences of petroleum. **Briefly explain** how you manage this resource if you are appointed as a Policy Maker in Petroleum Industry of Sri Lanka.

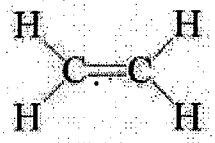
(d) Write a **short account** on major water based problems in Sri Lanka.

8) (a) What metals are used to make following alloys?

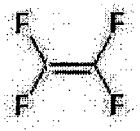
I. 22 Karat gold II. 22 Karat white gold
III. Stainless steel IV Coins

(b) Draw the structure of following polymers

i) ethane ----------> polyethene



ii) tetrafluoroethene ----------> polytetrafluoroethylene



(c) Match the polymers used to make following items
(polymethylmethacrylate, polyvinylchloride, Nylon 6,6, polystyrene, polyethyleneterephthalate)

i) Regifoam .....
ii) PET drinking water bottles .....
iii) Synthetic silk .....
iv) Plexiglass .....
v) Drainage pipes .....

(d) Plastics can be separated by looking at the recycling symbol on product. Identify the polymers denoted by following recycling symbols.

i) 

ii) 

iii) 

iv) 

(e) Briefly outline what students can do to make University canteen a more efficient and clean place by self discipline and recycling of garbage.