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| Family Name | | | | | |
| Given Name/s | | | | | |
| Student Number | | | | | |
| Teaching Period | Semester 2, 2018 | | | | |

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|---|---|--------------------|
| ENV103 – Environmental Issues | DURATION | |
| | | |
| | Reading Time: | 10 minutes |
| | Writing Time: | 120 minutes |
| INSTRUCTIONS TO CANDIDATES | | |
| <p>The examination has 3 sections.</p> <p>Section A: 35 marks (1 mark per question) Suggested Time: 45 mins Multiple Choice Questions: Answer ALL (35) questions.</p> <p>Section B: 40 marks (5 marks per question) Suggested Time: 40 mins Short Answer Questions: Answer ALL (8) questions.</p> <p>Section C: 25 marks (12.5 marks per question) Suggested Time: 35 mins Short Essay Questions: Answer ALL (2) questions.</p> | | |
| EXAM CONDITIONS | | |
| <p><u>You may begin writing from the commencement of the examination session.</u> The reading time indicated above is provided as a guide only.</p> | | |
| This is a CLOSED BOOK examination | | |
| No calculators are permitted | | |
| No handwritten notes are permitted | | |
| No dictionaries are permitted | | |
| | | |
| ADDITIONAL AUTHORISED MATERIALS | EXAMINATION MATERIALS TO BE SUPPLIED | |
| No additional printed material is permitted | 1 x 16 Page Book 1 x 4-Multiple Choice Answer Sheet 1 x Scrap Paper | |

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DOUBLE-SIDED.**

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LEFT BLANK.**

Section B
Short Answer Questions
Total No of Marks for this Section: 40

This section should be answered in the Answer Booklet provided.
Please Note that Questions 36, 38, 40 and 43 have an either/or choice.

Marks for each question are indicated. Suggested time allocation for Section B: 40 mins

Question 36

EITHER

What are two ways to deal with the degradation of a shared resource?

OR

What are the four approaches proposed by scientists to speed up ecological succession processes?

(Marks: 5)

Question 37

How and why is the replacement level fertility rate different in more developed countries as compared with less developed countries?

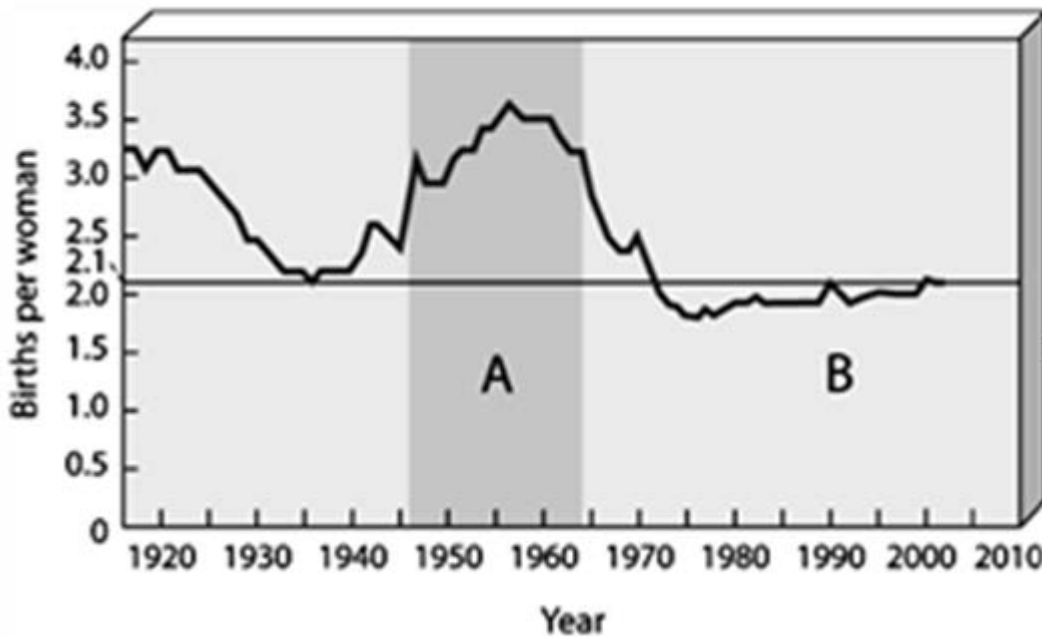
(Marks: 5)

Question 38

EITHER

The “biological capacity” is the ability of the natural world to replenish its renewable resources and absorb the resulting waste products and pollution. Exceeding the biological capacity creates an “ecological deficit.” Discuss the potential future implications for the Earth resulting from the fact that we are currently exceeding the earth’s biological capacity by about 50 percent.

OR



On the accompanying graph, what does the horizontal line at 2.1 births per women represent?
What does the section of the graph marked “A” represent?
What does the section of the graph marked “B” represent?

(Marks: 5)

Question 39

Explain how algae blooms form and how they contribute to the creation of dead zones.

(Marks: 5)

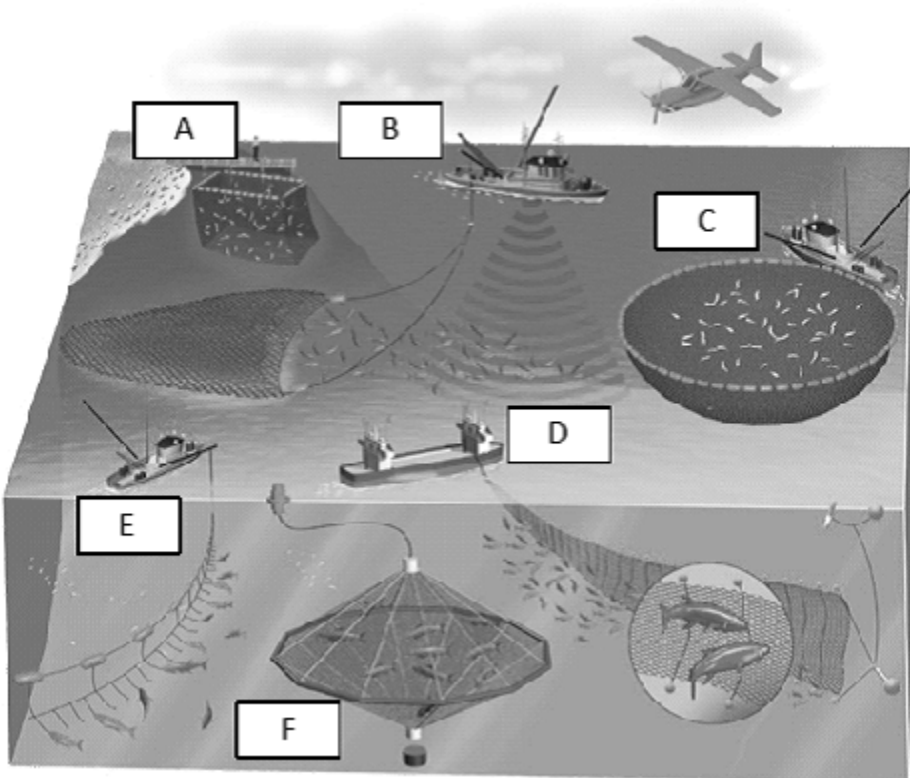
Question 40

EITHER

Pollution from vehicle exhaust is a primary factor in the formation of photochemical smog. What are three ways to reduce or prevent air pollution from vehicles?

OR

What is drift-net fishing? Which letter depicts drift-net fishing on the accompanying figure?



(Marks: 5)

Question 41

Most of the factors that can reduce the rate of growth of a population are focused on women. Why is this the case? In what general ways are men involved in decisions on reproduction and population change?

(Marks: 5)

Question 42

Why do you think controlling water pollution from point sources might be easier than water pollution from nonpoint sources? Use examples

(Marks: 5)

Question 43

EITHER

Which pollutants are responsible for cultural eutrophication of lakes?

OR

What are the major concerns with pumping water from ancient, deep aquifers?

(Marks: 5)

Section C
Short Essay Questions
Total Number of Marks for this Section: 25

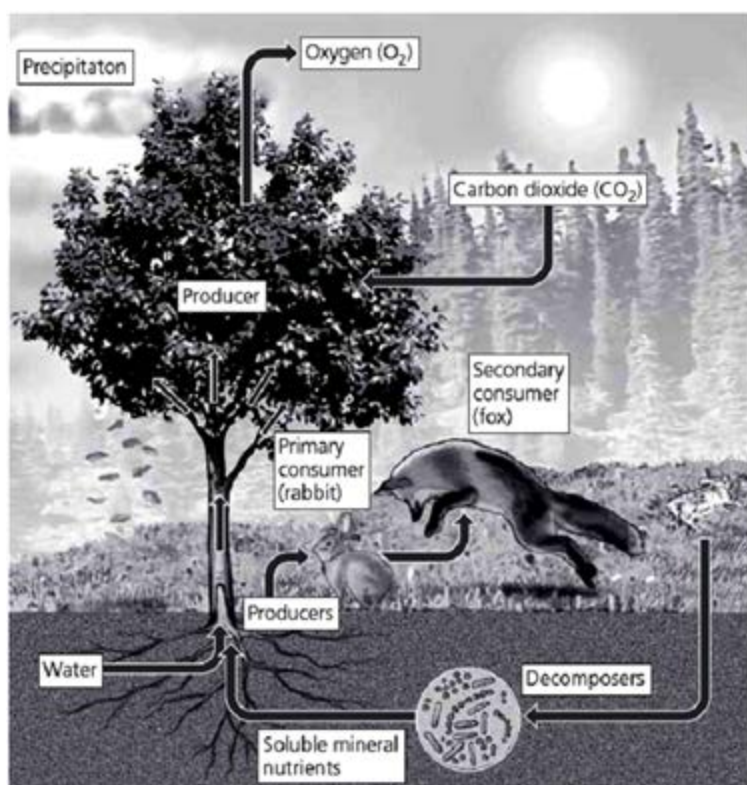
This section should be answered in the Answer Booklet provided.

Please Note that Question 45 has an either/or choice.

Marks for each question are indicated. Suggested time allocation for Section C: 35 mins

Question 44

In the accompanying figure, notice that the fox (secondary consumer) is in the process of pouncing on the rabbit. If humans were to remove that predator (fox), what would be the effects on the rest of the ecosystem? Be as specific as possible.



Key living (biotic) and nonliving (abiotic) components of an ecosystem in a field.

(Marks: 12.5)

Question 45

EITHER

Explain, in your own words, why the degradation and loss of honeybee colonies has important implications for biodiversity loss.

OR

Consider why global warming is likely to cause a lessening of the amount of the world's available freshwater and how that would likely cause changes throughout the downhill flow of freshwater.

(Marks: 12.5)