PASS MOCK EXAM – FOR PRACTICE ONLY

Course: __GEOG 1010 A Facilitator: _Patrick Spencer_
Date and location of mock exam take-up: December 6 & 9, 2010
Monday December 6th, 1 – 2:30 pm, TB 301
Thursday December 9th, 12 – 4 pm, ME 4494

IMPORTANT: There are a large amount of questions on this exam. You will not see nearly this many on your test, I just wanted to give you as much content as possible. This is not an exhaustive list of the content covered so far. It is up to you to know what to study

It is **most beneficial** to you to write this mock midterm **UNDER EXAM CONDITIONS**. This means:

- Work on your own.
- Keep your notes and textbook closed.
- Attempt every question.

After you are finished, go back over your work with a different colour or on a separate piece of paper and try to do the questions you are unsure of. Record your ideas in the margins to remind yourself of what you were thinking when you take it up at PASS.

The purpose of this mock exam is to give you practice answering questions in an exam setting and to help you to gauge which aspects of the course content you know well and which are in need of further development and review. Use this mock exam as a *learning tool* in preparing for the actual exam.

Please note:

- Come to the PASS session with your mock exam complete. There, you can work with other students to review your work.
- Often, there is not enough time to review the entire exam in the PASS session. Decide which questions you most want to review – the facilitator may ask students to vote on which questions they want to discuss.
- Facilitators do not bring copies of the mock exam to the session. Please print out and complete the exam before you attend.
- Facilitators do not produce or distribute an answer key for mock exams. Facilitators help students to work together to compare and assess the answers they have. If you are not able to attend the PASS session, you can work alone or with others in the class.

GOOD LUCK!

I will only give you a set of Short and Long answer questions. There are an abundance of Multiple Choice, True False and Matching questions available on the companion website:

Part A – Definitions: Define the following terms

Biogeography Pedology Illuviation Taiga Heliotrope Sustainability

Paradigm Planetary Impact Ecological Footprint Carrying Capacity Climate

Ecology Biogeography Pedogenesis Epiphyte Autotroph Biome

Part B – Short Answer

************Answer the following Questions***********

Do not be afraid to draw it out if you want to

1. Describe the process by which a MEDIAL MORAINE is generated (2 mks)

2. Glaciers form landforms through both erosional and depositional processes. Describe the formation of 1 erosional and one depostitional landform (2 mks)

3. Explain the difference between accumulation and ablation. Use these concepts to explain glacier retreat (3 mks)

4. Why and how does a glacier flow. Draw a velocity profile (3 mks)

5. Distinguish between ice caps and ice sheets (2 mks)

6. Draw a Drumlin and a Roche Mutonee. Explain how these landforms are formed (4 mks)

7. Describe how a KETTLE is formed. (1.5 mks)

8. List the four soil forming factors that are involved in a soil's development (2 mks)

9. What is the difference between ILLUVIATION and ELUVIATION? (2 mks)

10. A soil may consist of O, A, B and C horizons. What is a horizon? Describe each of these horizons (O, A, B and C). (3 mks)

11. What are the five factors needed for soil development? Explain how at least 2 of these factors are involved in the formation of a PODZOL. (4 mks)

12. Define 'Cation Exchange Capacity' and how it is related to a soil's fertility. (3 mks)

13. Name 2 of the general Koppen Climate Classifications that are found in Canada and describe them. (4 mks)

14. What is Eutrophication? Why/where does it occur and why is it an issue? (4 mks)

15. How does Nitrogen get into the Biosphere? (3 mks)

16. Describe the differences between Immobilization and Mineralization of Nitrogen. (2 mks)

17. List 2 biomes found in Canada. Describe the climate and 1 key plant adaptation for each. (2 mks)

18. Distinguish between Ecosystem and Community. Give an example for each. (3 mks)

19. List the form in which Carbon is found in all four soil components which form is susceptible to decomposition by organisms? (3 mks)

20. What are the two main needs for land that can be calculated with our Ecological Footprint? (1 mk)

21. Explain the 3 different ways that sea level can change. (3 mks)

22. List 5 depositional landforms that a glacier can leave behind. Describe two of them. (3 mks)

23. Same as above, but with Erosional features. (3 mks)

24. How does the CSSC differ from other countries' soil classification systems? (2 mks)

25. List the 10 Soil orders from the CSSC (5 mks)

26. Define soil quality and soil degradation. (2 mks)

27. List and Describe the characteristic horizons of a PODZOL (3 mks)

28. Where are the pools of Carbon on Earth? What role do plants fulfill in the carbon cycle? (3 mks)

29. Describe the impacts of Human population growth. (3 mks)

30. How do Global Scale Climates and Biomes affect and interact with each other? List one of each that interacts together. (3 mks)

31. Fill out the PASS survey available through the PASS website: www.carleton.ca/PASS the link on the left called "Student Feedback Survey" (it is the

9th link on the left hand link menu). You can also access it here:
http://surveys.questionpro.com/akira/TakeSurvey?id=1946330