

GE1101 - Final exam (14 Nov 2002)
Section B: Physical Geography

6. D
7. A
8. B
9. D
10. B
11. C
12. A
13. D
14. E
15. C
16. A
17. B
18. false
19. false
20. true/false (I marked both as correct, because the answer depends on the length of time considered)
21. false
22. false
23. Latitude is important because it determines the amount of solar radiation received as a function of Earth-Sun geometry (results in seasonal variation of temperature). Location is important because it determines the temperature range experienced. Continental locations have large temperature range, coastal locations have small temperature range.
25. Refer to one of the lecture slides depicting the hydrological cycle: Interception (by vegetation); infiltration or runoff (overland flow and stream flow); evaporation and transpiration (from open surfaces and through plant stomatas).
26. Rainfall (storms) and earthquakes. The latter cause more fatalities because they are unexpected.
27. This question is not part of the material covered in this year's class.

You mentioned that lag time is the diffce bwteen centre of mass ppt and centre of mass runoff. But most books refer to it as the diffce btwn between max ppt and peak discharge. Is the latter merely a more specific definition?

[The former is a more accurate description but the latter is more easily understood. Both would be regarded as correct.](#)

How does the building of the 3 gorges dam contribute to soil erosion and sedimentation? (global water issues lecture) or isit that soil erosion has led to sedimentation behind the dam?

[Soil erosion due to deforestation along the riverbanks. This will result in sedimentation primarily behind the dams because the water cannot flow freely](#)

anymore.

also... for "global climate change" lectures.....you mentioned emission scenarios (A2 and B2). I do not understand the implications that it has for emissions cos i dont know what A2 and B2 actually mean.....

A2 and B2 are described in the lecture notes (slide 28). How they affect the emissions can be seen in slide 29.

What is the meaning of interglacial?

The time period between to 2 glacial periods

why is is earthquakes can occur within plates?

This is rare but can occasionally occur when e.g. two parts of the SAME plate slip past each other.

Sun - Earth distance is largest during summer for northern hemisphere and smallest in winter? What about the southern hemisphere?

Same as for Northern hemisphere

What is the meaning of "enviromental laspe rate

Means the decrease of temperature with height

water in the soil water belt return to atmosphere thru evaporation and transpiration...why tranpiration?

Because roots take up soil water some of which will eventually be evaporated on the surface of the leaves (= transpiration).

Is it correct to say that the ice age is over?

My Answer: correct.

I'm not certain with my answer because from the additional reading, it seems like researches and observations do not tally. There is some part where it shows that the ice age is over while some parts proved it wrong. Also, is it that the temperature found will be different in every part of the world and hence we could not conclude whether the world is increasingly warmer and warmer?

The answer depends somewhat on the time period you are looking at. Just considering the last 100,000 years or so then one would say the ice age is over (since about 10,000 years ago). If one looks at the last few million years we observe that the current temperatures are still below what was observed hundreds of millions of years ago (please see slide 4 of the Global Climate Change lecture).

is the atmosphere experienced slight warming between 1000-1800?

My Answer: no

My answer was "no" as I think that in this period, it is the little ice age period.

You are correct, the atmosphere experienced slight cooling during this time period.

most of the fresh water on continents is not contained in ice sheets and glacier?

MY answer: true

I do not know that answer actually, but I guess that most of the fresh water was the ground water.

The answer is FALSE. Please check slide 4 of the Global Water Issues lecture and you will see that most of the fresh water is contained in glaciers and ice sheets

is the topic on "landuse and cover change" ,which talks about deforestation and undisturbed rainforest etc. , included in the final exam? Although there is readings on this topic, I realized that there isn't any lectures notes on this topic. No, it is not included and you don't have to do the related reading.

May I know what are the differences between Global Warming & GreenHouse Effect?

Global warming simply refers to the fact that current global average temperatures are increasing. The process by which this is happening is called the greenhouse effect (see lecture handouts for explanation of greenhouse effect)