Examination Period 3: 2016/17

GEO110817N

Module Title Geohazards
Level Four
Time Allowed Two hours

Instructions to students:

- Enter your student number not your name on all answer books.
- Answer all questions from Section A and two questions from Section B.
- The same material should not constitute a substantial part of more than one question.
- Neither books nor notes may be taken into the examination.
- The use of a non-programmable calculator is permitted.
- Students are not permitted to remove this examination paper from the examination room. For all purposes the examination paper remains the property of the University of Northampton.

No. of Pages 3
No. of Questions 13
Section A
Answer all questions.

1. Give a definition of Geohazards.  
(4 marks)

2. What are the most important factors to consider when assessing earthquake risk and hazards? Give reasons for your answers.  
(6 marks)

3. What are the main causes of tsunami? Briefly comment on whether tsunami warning systems have an important role to play in reducing the impacts of tsunami.  
(6 marks)

4. In what types of terrain do landslides tend to occur? Why is this?  
(4 marks)

5. Outline the main risk factors for wildfires.  
(4 marks)

6. Outline some effective strategies for dealing with tornado hazards.  
(4 marks)

7. What is the difference between water stress and water scarcity?  
(4 marks)

8. Give some examples of natural coastal defences that are adversely affected by urban development.  
(6 marks)

9. What are the specific hazards associated with tropical cyclones and what are some effective strategies for dealing with these?  
(6 marks)

Total: 44 marks
Section B

Answer two questions.

10. Pick a geohazards issue that has been in the news this academic year. Outline the response to the event and the consequences and state briefly if this event is likely to change management of similar events in the future. (28 marks)

11. How is climate change affecting geologic hazards? Pick a hazard affected by climate change and explain. Illustrate your answer with examples. (28 marks)

12. If you were in charge of planning regulations what restrictions would you place on development in a floodplain, landslide, volcanic or earthquake prone area (pick one of these hazards). Consider how to assess the risks of these hazards and mitigation strategies that could be used if some development had to occur in this area. (28 marks)

13. What are some of the main differences between the consequences of hazard events/natural disasters in developed countries vs the developing world? (28 marks)

Total: 56 marks

End of Section B
End of Paper