



SUBJECT: **Geography**
DATE: 30th August 2019
TIME: 4:00 p.m. to 7:05 p.m.

Directions to Candidates

Answer a total of **FOUR** questions: **TWO** questions from **EACH** of the two Sections.
The use of non-programmable calculators is permitted. **ALL** questions carry equal marks.

SECTION A: PHYSICAL GEOGRAPHICAL PROCESSES

1. (a) With the help of a well-labelled diagram, or a simplified flow-chart, describe **FIVE** ways how water reaching a drainage basin is transferred within the drainage basin system. (10)
- (b) Explain how the water movement through a drainage basin system may be influenced by each of the following:
 - (i) geology;
 - (ii) relief;
 - (iii) vegetation. (15)

(Total: 25 marks)
2. Daily weather forecasts nowadays include information about the levels of ultraviolet radiation known as UV Index.
 - (a) With the help of a diagram, explain how the ozone layer protects the Earth from ultraviolet (UV) radiation. (5)
 - (b) What measures have been taken over the years to maintain a healthy ozone layer? (10)
 - (c) Describe the effects of exposure to high levels of ultraviolet radiation in:
 - (i) human health; (5)
 - (ii) the natural environment. (5)

(Total: 25 marks)

Please turn the page.

3. Figure 1 is a map of Italy showing areas which are more vulnerable to earthquake activity.

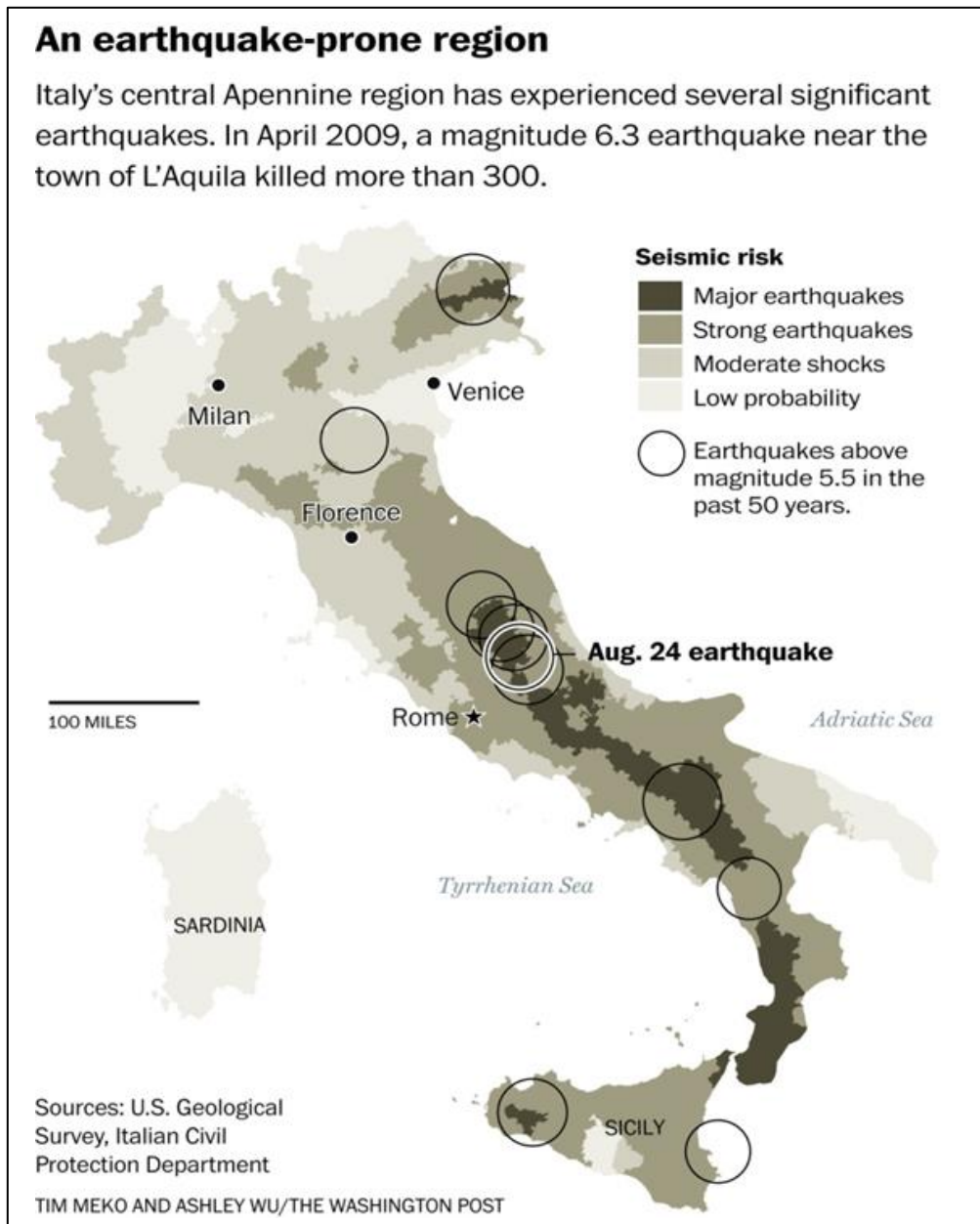


Figure 1: Italy as an earthquake-prone region and the location of one of its recent earthquakes on August 24th 2016. Source: U.S. Geological Survey

- (a) With reference to the tectonic pattern of the Mediterranean region, explain why the Apennine region in Italy is prone to earthquake hazards. (15)
- (b) More than 300 people in the town of Aquila were killed in April 2009 due to a strong earthquake. Describe what type of earthquake damages usually lead to such a death-toll. (5)
- (c) How can authorities minimise property damage and loss of life resulting from earthquakes? (5)

(Total: 25 marks)

4. (a) With the help of a labelled diagram, describe the main divisions and characteristics that form the internal structure of the Earth. (15)
- (b) Discuss how the landform changes on the surface of the Earth are highly connected with the processes happening internally within the Earth. (10)
- (Total: 25 marks)**

SECTION B: HUMAN GEOGRAPHICAL PROCESSES

5. (a) Why is it important for a country to have an effective waste management plan? (7)
- (b) Discuss **THREE** ways how waste can have a negative impact on the environment. (9)
- (c) Describe **THREE** measures which are being implemented locally to promote effective waste management. (9)
- (Total: 25 marks)**
6. (a) Sketch a well-labelled diagram of the Demographic Transition Model and, for each stage, describe and give reasons for the changes in the birth rate and the death rate. (19)
- (b) Give **ONE** advantage and **ONE** disadvantage of using the demographic transition model. (6)
- (Total: 25 marks)**

7. Figure 2 shows a survey map of an area in central Malta.

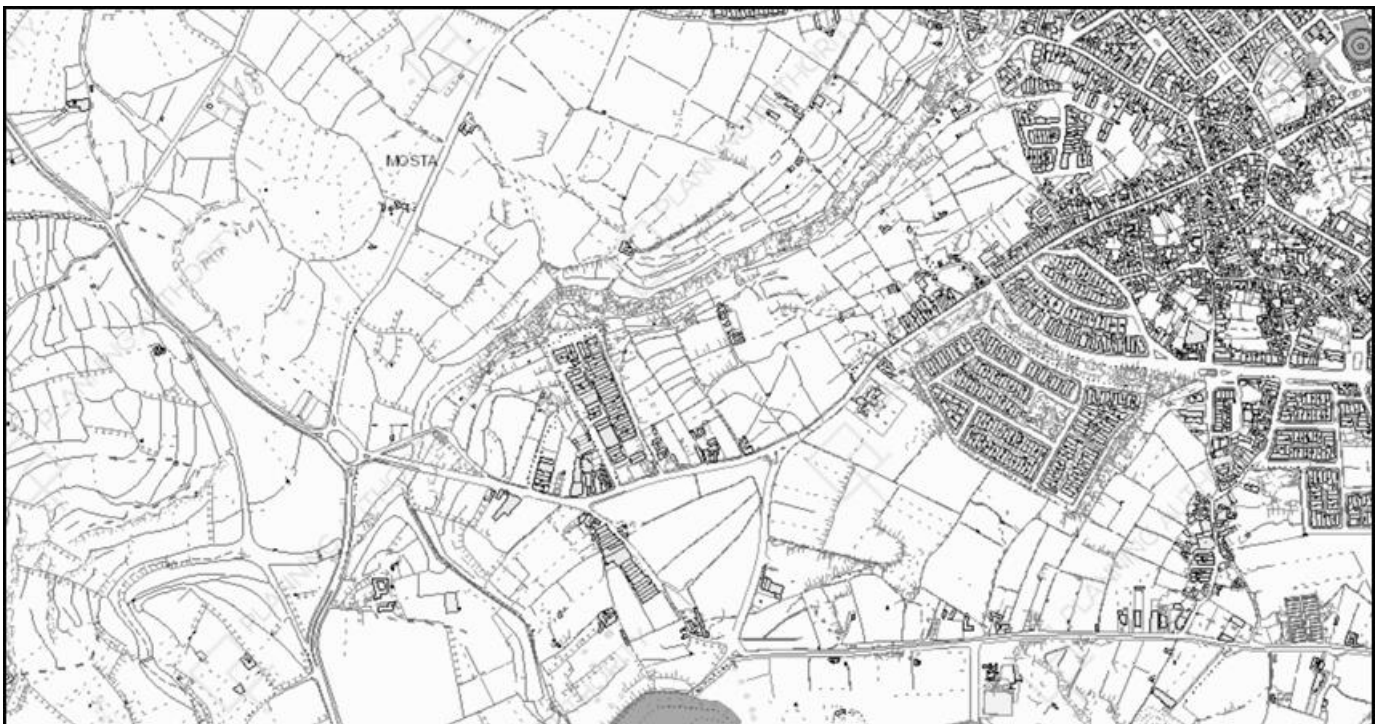


Figure 2 – Survey map of an area in central Malta

Source: <https://www.pa.org.mt/>

- (a) Describe **THREE** different land-uses for parts of the land shown in Figure 2. (12)
- (b) Discuss **THREE** benefits and **ONE** limitation of using land use maps. (13)
- (Total: 25 marks)**

8. Figure 3 shows the world population density in 2017.

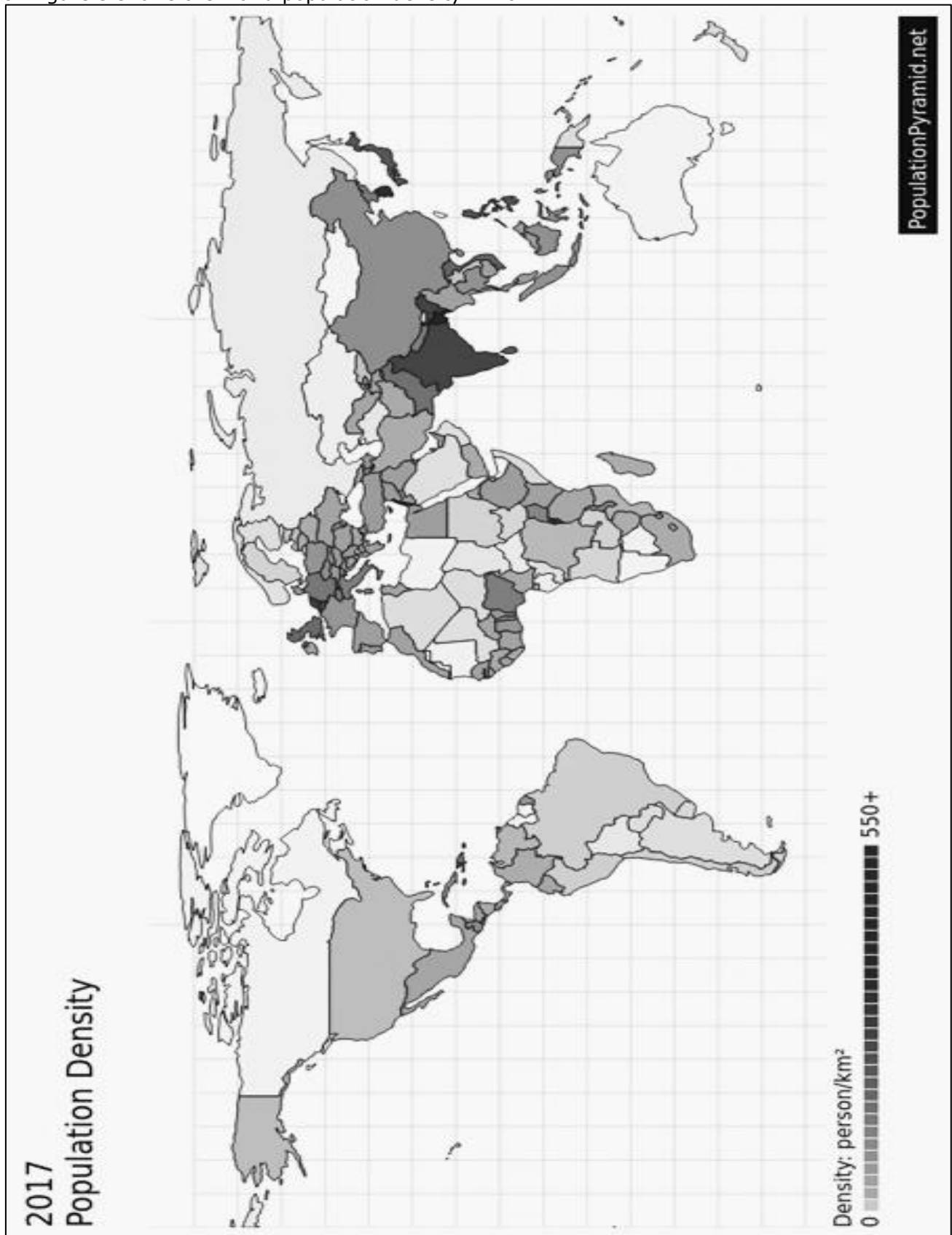


Figure 3: World Population Density in 2017

Source: www.populationpyramid.net

- (a) Define the term "population density". (2)
 - (b) Refer to Figure 3 and identify **TWO** countries that have a very high population density and **TWO** countries that have a very low population density. (4)
 - (c) Identify **TWO** human and **TWO** physical factors that contribute to a high population density. Give an example for each. (10)
 - (d) Discuss **THREE** problems associated with high population density areas. (9)
- (Total: 25 marks)**