



UNIVERSITY OF JOHANNESBURG

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL MANAGEMENT & ENERGY STUDIES

MODULE:	GR1AFET Geography for Education Introduction to Geography
CAMPUS:	APK
EXAM:	JUNE EXAM 2016

DATE: 2016.06.04

SESSION: 8:30 – 11:30

ASSESSORS:

**Ms D Greenberg
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MODERATORS:

**Ms M Rabumbulu
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DURATION: 2 Hours

MARKS: 100

Please read the following instructions carefully:

1. Answer ALL questions (except for Question 4, Section B. Here you may choose 4.1 or 4.2
2. This paper contains two sections – SECTION A and SECTION B - Answer each section in a separate answer book
3. Please number your answers clearly
4. This exam paper may not be removed from the exam venue

SECTION A – PHYSICAL GEOGRAPHY

QUESTION 1 - MULTIPLE CHOICE (Write the letter representing the appropriate answer next to the question number in your exam book)

1.1) Which of the following gives the correct sequence of layers in Earth, from the surface to the center?

- A) crust, inner core, mantle, outer core
- B) inner core, outer core, mantle, crust
- C) mantle, crust, inner core, outer core
- D) crust, mantle, outer core, inner core

1.2) Which of the following statements about Earth's core is not correct?

- A) It is composed primarily of iron.
- B) The inner core is believed to be liquid and the outer core solid.
- C) Scientists think the inner core formed before the outer core.
- D) A third of the Earth's entire mass, but only 1/6th of its volume lies in its core.

1.3) Which layer of the planet forms 80 percent of Earth's total volume, and has an average density of 4.5 grams/cm³?

- A) continental crust
- B) oceanic crust
- C) mantle
- D) core

1.4) Processes that are related expressly to streams and rivers are termed

- A) fluvial.
- B) geomorphic.
- C) lemnetic.
- D) lotic.

1.5) The uplift of mountains is caused by

- A) endogenic processes.
- B) aggradation.
- C) denudation.
- D) exogenic forces.

1.6) Which of the following is correct regarding joints?

- A) Joints are small, localized fault planes along which movement occurs.
- B) Joint impede both physical and chemical weathering.
- C) Joints decrease the amount of exposed surface area of rocks.
- D) Joints are fractures in rock that occur without displacement on either side.

1.7) The single most important control on temperature is

- A) insolation.
- B) altitude.
- C) distribution of land and water.
- D) latitude.

- 1.8) Which of the following is true regarding clouds?
- A) They increase temperature minimums and temperature maximums.
 - B) They cover about 15 percent of Earth's surface at any one time.
 - C) They have a moderating influence on temperatures.
 - D) They decrease nighttime temperatures and increase daytime temperatures.
- 1.9) As distance from the equator increases, seasonal variation in temperature tends to
- A) increase.
 - B) decrease.
 - C) remain constant.
- 1.10) Which of the following best describes the difference between weather and climate?
- A) Weather is the collective pattern of atmospheric conditions in a given region over long periods of time, whereas climate is the atmospheric conditions at a given time and place.
 - B) Climate is the collective pattern of atmospheric conditions in a given region over long periods of time, whereas weather is the atmospheric conditions at a given time and place.
 - C) Weather refers specifically to the temperature of a given place at a given time, whereas climate refers to temperature, humidity, pressure, and wind conditions of a given place at a given time.
 - D) Climate refers specifically to the temperature of a given place at a given time, whereas weather refers to temperature, humidity, pressure, and wind conditions of a given place at a given time.
 - E) Weather and climate are essentially the same thing.

[10]

QUESTION 2 – FILL IN THE MISSING WORDS

- 2.1) An _____ system encompasses internal processes that produce flows of heat and material from deep below Earth's crust (Tectonics, Earthquakes, and Volcanism). (1)
- 2.2) Plate tectonics is the theory that the lithosphere is divided into a number of plates that float independently over the mantle. In 1912, German geophysicist and meteorologist _____ presented an idea that challenged long held assumptions in geology, and three years later published his book Origin of the Continents and Oceans. (1)
- 2.3) _____ occur where plates slide past one another, usually at right angles, to a seafloor spreading center, forming transform faults. (1)
- 2.5) _____ scale is based on amplitude of seismic waves, which is related to energy released. (1)
- 2.6) _____ is a type of erosive work performed by flowing water alone, a squeeze-and-release action that loosens and lifts rocks. (1)
- 2.7) _____ processes include erosion, transportation, and deposition accomplished by wind. The ability of wind to move materials (1)

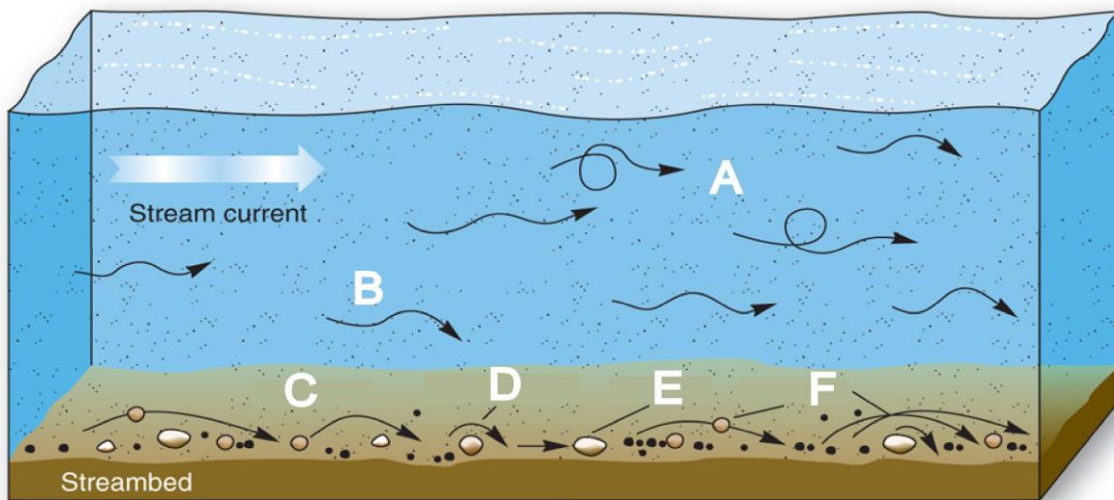
[6]

QUESTION 3 - DEFINE THE FOLLOWING TERMS (give an example where applicable)

- 3.1) Epicentre (1)
- 3.2) Channel incision (1)
- 3.3) Desertification (1)
- 3.4) Ecosystem (2)
- 3.5) An estuary (1)

[6]**QUESTION 4 – SHORT QUESTIONS**

- 4.1) Label the letters A – F on the following diagram (6)



- 4.2) Name 2 threats to our Marine Ecosystems (2)
- 4.3) Why is soil classified as a “NON-RENEWABLE RESOURCE”? (1)
- 4.4) The use of natural resources can lead to a variety of environmental impacts. Discuss this statement and give examples (3)

[12]**QUESTION 5 - LONG QUESTIONS**

- 5.1) Discuss Convergent boundaries (8)
- 5.2) Explain how climatic conditions influence the weathering process (4)
- 5.3) Describe how Ocean Currents and Sea-Surface Temperatures affect temperature (4)

[16]**SUB TOTAL [50]**

SECTION B – HUMAN GEOGRAPHY

QUESTION 1 – MULTIPLE CHOICE (Write the letter representing the appropriate answer next to the question number in your exam book)

1.1 Carrying capacity is

- A. the maximum biomass an environment will produce.
- B. a function of distance decay.
- C. the maximum number of people that can be supported by resources and technology available.
- D. a reflection of cultural subduction.

1.2 The first stage of the demographic transition is marked by

- A. high birth rates, high but fluctuating death rates.
- B. high birth rates, low and stable death rates.
- C. declining birth rates, continuing high death rates.
- D. high birth rates, declining death rates.

1.3 The development gap between the most and least advanced countries appears to be

- A. decreasing.
- B. remaining about the same.
- C. widening.
- D. illusory; it exists only in biased and inaccurate statistics.

1.4 The continuously built up landscape with no reference to the political boundaries that limit the legal city of which it is the extension is called the

- A. central city.
- B. urbanized area.
- C. Consolidated Metropolitan Statistical Area.
- D. metropolitan area.

1.5 According to the concentric zone model, land uses are arranged in which order, moving outward from the center of the city?

- A. CBD, zone of transition, zone of industrial workers, commuters' zone, zone of better residences
- B. zone of industrial workers, zone of transition, zone of better residences, CBD, commuters' zone
- C. CBD, zone of transition, zone of industrial workers, zone of better residences, commuters' zone
- D. CBD, zone of industrial workers, zone of transition, zone of better residences, commuters' zone

1.6 Gross national product reports

- A. a country's total monetary value of goods and services produced in a given time period.
- B. national per capita income per annum.
- C. the total volume of national production moving in commercial exchange.
- D. the total price of domestic production plus the fair market value of family and voluntary labor.

1.7 The continent with the highest total fertility rates overall is

- A. Africa.
- B. Asia.
- C. South America.
- D. Europe.

- 1.8 Some 90% of the world's population resides on less than what percent of its land area?
- A. 10%
 - B. 20%
 - C. 30%
 - D. 40%
- 1.9 A broad-based population pyramid suggests that a country is in what stage of the demographic transition?
- A. first
 - B. second
 - C. third
 - D. fourth
- 1.10 "Megalopolis" is the term used to describe a
- A. huge metropolitan area such as New York.
 - B. coalescence of several metropolitan areas.
 - C. new city mainly of suburban character, such as Los Angeles.
 - D. city of ancient Greece having many of the characteristics of present-day cities.
- 1.11 Tertiary activities are
- A. located in response to the distribution of demand and purchasing power.
 - B. extensive in their land use requirements.
 - C. evenly distributed within any given region.
 - D. clustered near break-of-bulk points.
- 1.12 The crude death rate for wealthy Western Europe is much higher than that for Central America because
- A. foreign aid and free medical services are widely available in Central America.
 - B. higher urbanization in Western Europe increases the incidence of infectious diseases.
 - C. Western Europe has a higher proportion of old people.
 - D. tropical areas, including Central America, generally have healthier climates than northern latitude regions.
- 1.13 Which of the following characteristics of a national population is NOT evident from its population pyramid?
- A. age structure
 - B. sex structure
 - C. dependency ratio
 - D. infant mortality ratio
- 1.14 Numerically, the smallest of the major world population concentrations is that of
- A. East Asia.
 - B. South Asia.
 - C. the northeastern United States and southeastern Canada.
 - D. Europe.
- 1.15 The doubling time for world population at recent rates of increase is about
- A. 15 years.
 - B. 25 years.
 - C. 50 years.
 - D. 60 years.

1.16 The majority of new arrivals in Third World cities settle in impoverished squatter districts.

- A. True
- B. False

1.17 A fair summary of the social geography of cities is that variation in social status is sectoral, family status shows concentric zonation, and ethnicity is clustered or nucleated.

- A. True
- B. False

1.18 In developing countries, the rich are most apt to live close to the city center.

- A. True
- B. False

1.19 Since many societies have a predominantly young age structure, their populations will tend to increase over the short run despite successful national family planning programs.

- A. True
- B. False

1.20 The rate of world population increase began to slow notably after World War II.

- A. True
- B. False

[20]

QUESTION 2 – SHORT QUESTION

2.1 Discuss the least-cost theory.

[10]

QUESTION 3 DEFINITIONS (Briefly define the following concepts)

3.1 Offshoring (2 ½)

3.2 Neocolonialism (2 ½)

[5]

QUESTION 4 - ESSAY

4.1 Some central cities have experienced decline. Discuss how gentrification and central city renewal combats this trend. (15)

OR

4.2 Discuss the various economic and non-economic measures of development. (15)

[15]

SUB TOTAL [50]

TOTAL [100]