



UNIVERSITY OF JOHANNESBURG

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL MANAGEMENT & ENERGY STUDIES

MODULE:	GR1BFET Geography for Education 1B
CAMPUS:	APK
EXAM:	November 2016

DATE: 24 November 2016

SESSION: 08:30 – 11:30

ASSESSOR:

**Ms D. Greenberg
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MODERATORS:

**Prof N. Kotze
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DURATION: 2 Hours

MARKS: 100

Please read the following instructions carefully:

1. Answer ALL questions
2. This paper consists of 2 sections.
3. Number your sections and answers carefully and neatly
4. This exam paper may not be removed from the exam venue

SECTION A - PHYSICAL GEOGRAPHY**QUESTION 1 - SOLAR ENERGY TO EARTH AND THE SEASONS**

Multiple choice:

- 1.1) Light travels at a speed of approximately
A) 80,500 kilometers per hour (50,000 mph).
B) 300,000 kilometers per hour (186,336 mph).
C) 300,000 kilometers per second (186,333 miles per second).
D) 1,000,000,000 kilometers per second (621,118,012 miles per second).
- 1.2) Which of the following is correct regarding daylength?
A) Daylength is uniform at all latitudes throughout the years.
B) People living at the equator experience 6 hours difference in daylength between the summer and winter.
C) The equator always receives equal hours of day and night.
D) The range of daylength is shortest in the polar regions.
- 1.3) Changes in daylength and the Sun's altitude above the horizon over the course of the year
A) produce Earth's rotation.
B) are phenomena that occur only at the equator.
C) are responsible for the seasons.
D) are factors that follow an irregular, random cycle.

(3)

Distinguish

- 1.4) Distinguish between revolution and rotation as it relates to the earth and sun

(5)

Total Question 1 [8]

QUESTION 2 - EARTH'S MODERN ATMOSPHERE

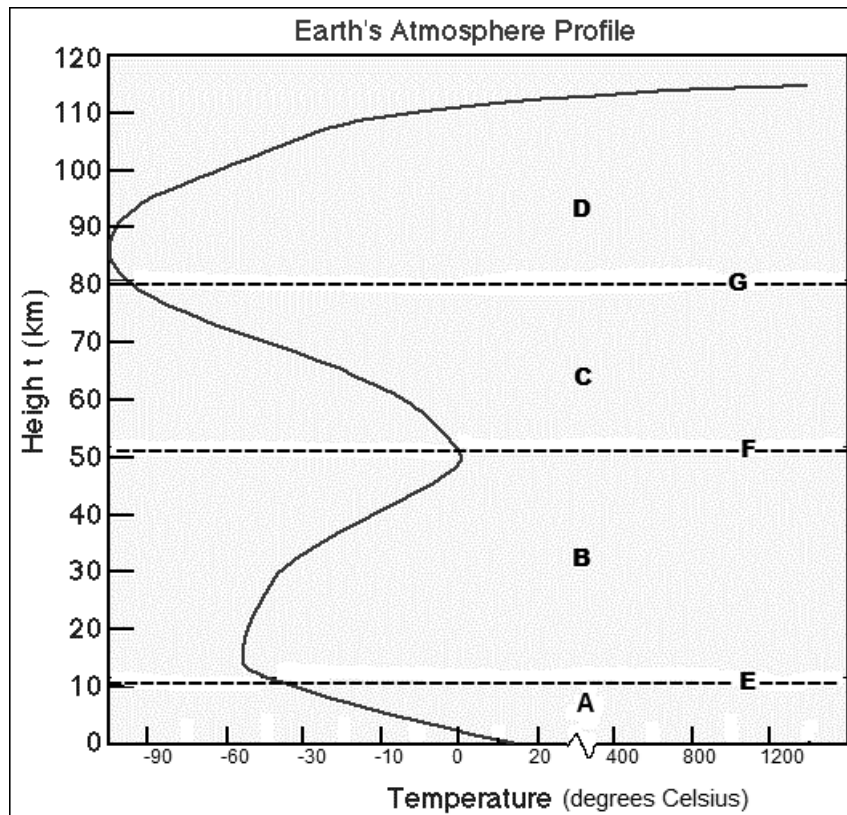
Define the following terms:

- 2.1) Photochemical smog (1)
2.2) Acid rain (2)

(3)

Label

2.3) The following diagram depicts Earth's Atmospheric Profile based on temperature. Complete the labels A – G. (7)



(7)

Total Question 2 [10]

QUESTION 3 - ATMOSPHERE AND SURFACE ENERGY BALANCES

Define the following terms:

- 3.1) Transmission (1)
- 3.2) Latent heat (1)
- 3.3) Scattering: (1)
- 3.4) Diffuse radiation (1)
- 3.5) Refraction (1)

(5)

Total Question 3 [5]

QUESTION 4 - WATER AND ATMOSPHERIC MOISTURE

Define the following terms:

- 4.1) Condensation (1)
- 4.2) Evaporation (1)
- 4.3) Deposition (1)
- 4.4) Sublimation (1)
- 4.5) Humidity (2)
- 4.6) Relative humidity (2)
- 4.7) Dew Point (2)

(10)

Explain and discuss

- 4.8) Why does ice float on water? (3)
- 4.9) Discuss atmospheric stability (3)

(6)

Total Question 4 (16)

QUESTION 5 - WATER RESOURCES

Multiple Choice Questions

5.1) Which of the following is true regarding freshwater on Earth?

- A) Most of it is in large lakes.
- B) Most of it is frozen in glaciers and ice caps.
- C) Most of it is in freshwater lakes, rivers, and streams.
- D) Most of it is groundwater.

5.2) The hydrologic cycle

- A) involves the continuous movement of water in all its states throughout the lower atmosphere, biosphere, lithosphere, and hydrosphere.
- B) is limited to freshwater circulation in the hydrosphere.
- C) refers to the highly localized transfer of water from plants and soils to the atmosphere and back.
- D) is the groundwater component of the global water cycle.

5.3) _____ occurs when precipitation lands on vegetation or other land cover before reaching the surface.

- A) Infiltration
- B) Overland flow
- C) Interception
- D) Surface runoff

- 5.4) _____ occurs when soil soaks water into the subsurface
- A) Throughfall
 - B) Overland flow
 - C) Infiltration
 - D) Stem flow
- 5.5) The downslope, unchannelized flow of water across the surface is known as
- A) throughfall.
 - B) overland flow.
 - C) infiltration.
 - D) stem flow.
- 5.6) The subsurface are in which all pore spaces are completely fill with water is known as
- A) zone of saturation.
 - B) gravitational zone.
 - C) water table.
 - D) base flow.
- 5.7) If precipitation and soil moisture are inadequate to meet potential evapotranspiration demands, the moisture condition is described as
- A) actual evapotranspiration.
 - B) a surplus.
 - C) a deficit.
 - D) soil moisture utilization.
- 5.8) Soil moisture that plants are capable of accessing and using is called
- A) wilting point water.
 - B) free molecular water.
 - C) capillary water.
 - D) hygroscopic water.
- 5.9) Soil moisture tightly bound to each soil particle and unavailable for plant use is termed _____ water.
- A) capillary
 - B) gravitational
 - C) available
 - D) hygroscopic
- 5.10) Which of the following is not an example of a potential surface water resource?
- A) artificial lakes
 - B) aquifers
 - C) glaciers
 - D) rivers
- 5.11) The water in wetlands is
- A) always freshwater.
 - B) always saltwater.
 - C) either freshwater or saltwater.
 - D) too polluted to use as a water resource.

Total Question 5 [11]

Total Section A [50]

SECTION B – HUMAN GEOGRAPHY**QUESTION 1 – MULTIPLE CHOICE**

1. The smallest distinctive item of culture is called a culture
 - A. norm.
 - B. complex.
 - C. trait.
 - D. phoneme.
2. The classification of languages by origin and historical relationship is called
 - A. symbiotic classification.
 - B. organic classification.
 - C. syncretic classification.
 - D. genetic classification.
3. The degree of segregation of minority groups is measured by their
 - A. racial uniformalism.
 - B. ethnic syncretism.
 - C. economic acculturation.
 - D. social distance.
4. Folk customs are usually
 - A. rapidly diffused from their origin points by television network publicity and advertising.
 - B. developed in advanced societies able to experiment with different ways of doing things.
 - C. the product of homogeneous, self-sufficient, isolated groups.
 - D. inspired by newsworthy events and perpetuated to commemorate them.
5. An assemblage of interrelated culture traits comprises a culture
 - A. realm.
 - B. complex.
 - C. region.
 - D. landscape.
6. The study of place names as evidence of past cultural presence and change is called
 - A. topography.
 - B. topology.
 - C. toponymy.
 - D. loconumology.
7. Self-chosen segregation of ethnic groups can serve these four functions:
 - A. defense, public welfare, concealment, preservation.
 - B. defense, assertion, support, preservation.
 - C. assertion, concealment, assimilation, support.
 - D. isolation, nucleation, concentration, preservation.
8. The landscape created by human action is called the
 - A. created culture.
 - B. material envelope.
 - C. constructed landscape.
 - D. built environment.

9. When different, unconnected culture hearths display comparable characteristics and forms of development, they are said to display
- A. identical creativity.
 - B. unilateral similarity.
 - C. interconnected uniformity.
 - D. multilinear evolution.
10. The world's oldest major religion is
- A. Buddhism.
 - B. Shintoism.
 - C. Judaism.
 - D. Hinduism.
11. The level of minority penetration of a neighborhood that initiates rapid exodus of the earlier dominant resident group is known as the
- A. tipping point.
 - B. panic point.
 - C. exodus ratio.
 - D. flight level.
12. Popular culture
- A. increases the individuality of landscapes defined by folk and ethnic culture.
 - B. reflects the grass-roots rejection of behavioral norms established by central governments and schools.
 - C. gives rise to clearly recognizable regional differentiation within Western societies, including the United States.
 - D. tends toward behavioral uniformity and the reduction of regional differences.
13. Cultural convergence implies that
- A. distinctive cultures will disappear.
 - B. world populations increasingly share a common technology.
 - C. all cultures can be traced back to a common ancestor group.
 - D. world trade reduces the importance of national borders
14. Buddhism, Islam, and Christianity have been called "universalizing" religions because each
- A. is widely distributed with many adherents on all continents.
 - B. proclaims the divine origin of the universe.
 - C. claims universal applicability and seeks converts.
 - D. promises a universally accessible afterlife for all humanity.
15. Ethnocentrism is the feeling of the superiority of one's own ethnic group.
- A. True
 - B. False
16. Distance may serve as an absorbing barrier to diffusion.
- A. True
 - B. False
17. Christianity expanded solely through expansion diffusion.
- A. True
 - B. False

18. Multiethnic societies everywhere have experienced a recent reduction of cultural pluralism and ethnic divisions as a result of better communication and economic development.
- A. True
 - B. False
19. Preagricultural societies tended to be highly stratified socially and highly specialized functionally, reflecting the defensive, hunting, and gathering roles of their individual members.
- A. True
 - B. False
20. All the universalizing religions had their origin hearths in the Near East.
- A. True
 - B. False

Total Question 1 [20]

QUESTION 2: CULTURAL GEOGRAPHY

Answer any two of the following questions

- 2.1 Discuss the process of globalization with particular focus on popular culture. (15)
- 2.2 Using relevant examples, distinguish between the concepts of acculturation and assimilation. (15)
- 2.3 Write an essay discussing the processes that contribute to culture change. (15)

Total Question 2 [30]

Total Section B [50]