

SMZ  
ZANZIBAR EXAMINATIONS COUNCIL  
FORM THREE ENTRANCE EXAMINATION

031

GEOGRAPHY

**Time: 2:30 Hours**

**ANSWERS**

**tuesday, 10th december, 2019.**

**Instructions**

1. This paper consists of sections A, B, and C.
2. Answer **all** questions in the spaces provided.
3. Section A and C carry **fifteen (15)** marks each and section B carries **seventy (70)** marks.
4. All writings must be in **blue** or **black** ink.
5. Communication devices and any unauthorized materials are **not** allowed in the assessment room.
6. Write your **Assessment Number** at the top right hand corner of every page.

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1. Choose the correct answer from the given alternatives by writing its letter in the table below.

i. Two major elements that determine the climate of a place are:

- A: Temperature and pressure
- B: Temperature and rainfall
- C: Wind and pressure
- D: Wind and rainfall

**Answer: B. Temperature and rainfall**

**Rainfall and temperature are the primary factors influencing a region's climate because they directly affect vegetation, soil moisture, and agricultural activities.**

ii. During the night, the sea temperature is higher than the land because:

- A: The sea loses heat faster than the land
- B: The sea gains the heat faster than the land
- C: The land loses heat faster than the sea
- D: The land breeze increases the sea temperature

**Answer: C. The land loses heat faster than the sea**

**Land surfaces cool down more rapidly at night due to lower heat capacity compared to water, which retains heat longer.**

iii. Maldives islands are located in the:

- A: Atlantic Ocean
- B: Arctic Ocean
- C: Indian Ocean
- D: Pacific Ocean

**Answer: C. Indian Ocean**

**The Maldives is an archipelago located in the warm waters of the Indian Ocean, south of India.**

iv. Most of the solar system bodies can be observed by the instrument called:

- A: Microscope
- B: Radiosonde
- C: Telegram
- D: Telescope

**Answer: D. Telescope**

**Telescopes are used to observe celestial bodies like stars, planets, and moons in the solar system.**

v. The word "Geography" was originated from:

- A: English words
- B: Greek words

- C: Spanish words
- D: Turkish words

**Answer: B. Greek words**

**The term Geography is derived from Greek words "geo," meaning Earth, and "graphia," meaning to write or describe.**

vi. The long and fairly narrow raised part of the ocean floor is called:

- A: Ocean ridge
- B: Continental slope
- C: Continental shelf
- D: Ocean trenches

**Answer: A. Ocean ridge**

**Ocean ridges are underwater mountain ranges formed by tectonic activity along divergent plate boundaries.**

vii. Basically, weather is the condition of the atmosphere of a place at a particular time in:

- A: Day to day
- B: Decade to decade
- C: Year to year
- D: Century to century

**Answer: A. Day to day**

**Weather refers to short-term atmospheric conditions like temperature, humidity, and precipitation.**

viii. The third largest lake in the world is:

- A: The Lake Baikal
- B: The Lake Superior
- C: The Lake Tanganyika
- D: The Lake Victoria

**Answer: B. The Lake Superior**

**Lake Superior, located in North America, is the third largest lake by surface area globally.**

ix. The International Astronomical Union (IAU) denoted Pluto as a dwarf planet in:

- A: 1930
- B: 2000
- C: 2003
- D: 2006

**Answer: D. 2006**

**Pluto was reclassified as a dwarf planet in 2006 due to its inability to clear its orbit of other debris.**

- x. The condition at the atmosphere where the temperature is cooled and becomes saturated is called:  
A: Focus point  
B: Dew point  
C: Saturated point  
D: Focal point

**Answer: B. Dew point**

**Dew point is the temperature at which air becomes saturated with moisture and dew forms.**

2. Match the items in Column A with the responses in Column B by writing the letter of the correct answer in the table below.

Column A

- i. Greenhouse gases
- ii. Mafia
- iii. Panama Isthmus
- iv. Cardinal points
- v. Bolide
- vi. Climate change
- vii. Circumnavigation
- viii. Syria
- ix. Ocean currents
- x. The sun

Column B

- A: A place where the Great Rift Valley starts
- B: Joined Asia and Europe
- C: South East and North East
- D: Factor affecting climate
- E: Includes droplets, dust, and soot
- F: A very brilliant meteor
- G: Lies on a continental shelf
- H: Evidence of the earth's flattened shape
- I: North, South, East, and West
- J: Forms about 50% of the solar system
- K: The slow changing of the earth's overall climate over a long period of time
- L: Joined North America and South America
- M: Evidence of the earth's spherical shape

Answers

- i. D
- ii. G
- iii. L

- iv. I
- v. F
- vi. K
- vii. H
- viii. B
- ix. C
- x. J

3. Write T if the statement is correct and F if the statement is incorrect in the table below.

i. All satellites in the solar system have the same sizes.

Answer: F

Satellites, both natural (like moons) and artificial, vary widely in size. For instance, Jupiter's moon Ganymede is larger than Mercury, while Mars' moon Deimos is relatively small.

ii. Rotation and revolution of the Earth occur simultaneously.

Answer: T

The Earth rotates on its axis every 24 hours, causing day and night, and simultaneously revolves around the Sun over approximately 365.25 days, leading to the progression of seasons.

iii. Solar energy efficacy is determined by the weather condition of an area.

Answer: T

Weather conditions, such as cloud cover and precipitation, directly impact the efficiency of solar energy systems by affecting the amount of sunlight that reaches solar panels.

iv. Antarctica is the smallest continent of the world.

Answer: F

Antarctica is the fifth-largest continent; Australia is the smallest.

v. Starting point of reading grid reference is south west corner.

Answer: T

In grid referencing, especially on maps, the convention is to start reading from the southwest (bottom-left) corner to determine coordinates.

vi. Hail is the combination of snow and rain.

Answer: F

Hail consists of layers of ice formed when updrafts in thunderstorms carry raindrops upward into extremely cold areas of the atmosphere, causing them to freeze.

vii. The total number of days in the leap year is 365.

Answer: F

A leap year contains 366 days, with an extra day added to February to account for the additional 0.25 days in each year.

viii. The thermometers are kept within the Stevenson's screen.

Answer: T

Stevenson screens are shelters that house meteorological instruments, including thermometers, to protect them from direct sunlight and precipitation, ensuring accurate readings.

ix. Dairy farming is the rearing of livestock for the production of meat.

Answer: F

Dairy farming involves raising livestock, primarily cows, for milk production, not meat.

x. Hundreds of comets are noticed from the Earth daily.

Answer: F

Comets are relatively rare celestial events; observing hundreds daily from Earth is not typical.

4. a) Define weather station.

A weather station is a facility equipped with instruments and equipment to observe and measure atmospheric conditions such as temperature, humidity, wind speed, and rainfall to provide data for weather forecasting and climate monitoring.

b) Outline two suitable guidelines to establish site for weather station.

i. The site should be open and away from obstructions such as tall buildings or trees to ensure accurate measurement of weather elements like wind and sunshine.

ii. The area should be secure and easily accessible to facilitate regular maintenance and data collection.

c) Write down the instruments used to measure the following elements of weather.

i. Sunshine - Sunshine recorder

ii. Atmospheric pressure - Barometer

iii. Temperature - Thermometer

iv. Humidity - Hygrometer

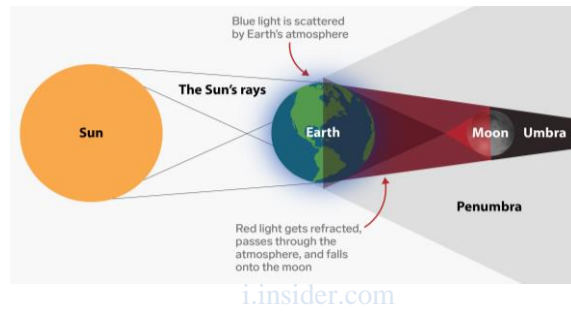
5. a) What is eclipse?

An eclipse is a celestial event that occurs when one celestial body moves into the shadow of another, blocking its light partially or completely from reaching an observer.

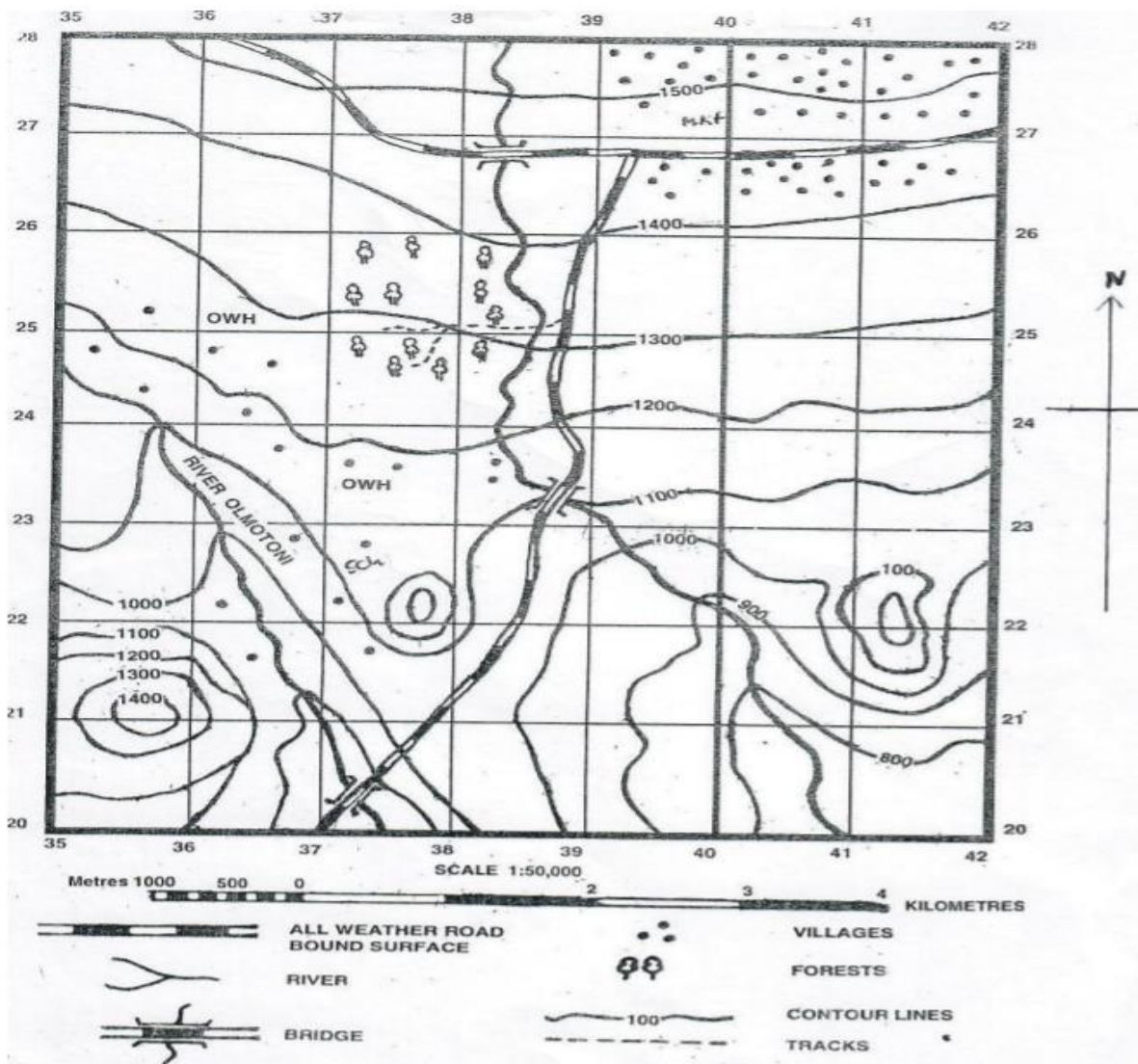
b) Give brief explanation on partial lunar eclipse.

A partial lunar eclipse occurs when only a portion of the Moon passes through the Earth's umbra, the central and darkest part of its shadow. This happens when the Sun, Earth, and Moon are not perfectly aligned, and the Earth's shadow covers part of the Moon's surface, leaving the rest illuminated.

c) Draw a clear diagram of lunar eclipse.



6. Study the map carefully and then answer the questions that follow.



a) Identify features found in the following grid references:

i) 363251

Bridge

ii) 360234

Forest

iii) 377248

Village

iv) 383268

River

b) Give two signs and two symbols used on the map above.

Signs:

1. Contour lines (to show elevation).
2. All-weather roads (to indicate infrastructure).

Symbols:

1. Tree symbol (to show forested areas).
2. Blue line (to represent rivers or streams).

c) With examples from the map, name any two possible human activities that can be carried out.

i) Agriculture: The presence of villages indicates farming activities.

ii) Fishing: The proximity of rivers suggests fishing as a possible activity.

7. Answer the following questions:

a) Define a sketch map.

A sketch map is a simplified hand-drawn representation of an area, showing major features without adhering to a specific scale.

b) Mention three characteristics of a sketch map.

1. Simplified representation with major features only.
2. Lacks a precise scale.
3. Includes annotations or labels for landmarks.

c) Give one difference between cartography and cartographer.

Cartography is the study and practice of making maps, while a cartographer is a person who creates maps.



8. Illustrate the economic importance of mining industry to the economy of Tanzania. (Give four points).

The mining industry significantly contributes to Tanzania's economic development through various means. Mining involves the extraction of minerals like gold, diamonds, tanzanite, and other valuable resources that have become major export commodities for the nation.

The first economic importance of the mining industry is its contribution to Tanzania's GDP. Revenue from exporting minerals accounts for a substantial portion of the national income, enabling the government to finance developmental projects like health, education, and infrastructure. Secondly, mining creates employment opportunities for both skilled and unskilled laborers, thus reducing unemployment levels and improving household incomes. Another importance is that mining attracts foreign direct investment, which brings capital, modern technology, and expertise into the country, further boosting economic growth. Lastly, mining has spurred infrastructure development as roads, railways, and electricity networks are constructed to support mining operations. These developments also benefit other sectors of the economy, improving connectivity and service delivery.

9. Describe any five problems facing livestock keeping in East Africa.

Livestock keeping in East Africa is an essential economic activity that provides meat, milk, hides, and employment. However, it faces several challenges that affect its productivity and sustainability.

One major problem is drought, which frequently affects East Africa, leading to a lack of water and pasture for animals. This results in livestock starvation, reduced productivity, and even death. Secondly, livestock diseases, such as foot-and-mouth disease and East Coast fever, reduce animal health and productivity, affecting the income of farmers. Another issue is land conflicts between livestock keepers and farmers, where disputes over grazing land often led to violence and destruction of property. Poor infrastructure, such as inadequate roads and markets, limits the accessibility of livestock products to urban centers and export markets. Finally, the low adoption of modern farming techniques, such as improved breeds and feeding methods, reduces productivity and profitability in the livestock sector.

10. Examine four benefits of the Rufiji Basin Development Authority.

The Rufiji Basin Development Authority (RUBADA) was established to manage and utilize the Rufiji River Basin's resources for economic development and environmental sustainability.

One benefit of RUBADA is the generation of hydroelectric power. Projects like the Julius Nyerere Hydropower Plant provide a reliable source of electricity for households and industries, reducing power shortages. Secondly, RUBADA supports irrigation farming, which ensures consistent agricultural production even during dry seasons, thereby improving food security. Another benefit is the creation of employment opportunities in various sectors such as agriculture, construction, and energy, contributing to improved livelihoods. Lastly, RUBADA helps in water conservation by developing reservoirs that supply clean water for domestic and industrial use, addressing water scarcity issues in the region.

11. Explain five disadvantages of pipeline transport.

Pipeline transport is widely used for the movement of liquids such as oil and gas. While it is efficient, it also has several disadvantages.

One disadvantage is the high initial cost of construction. Laying pipelines requires substantial financial investment, making it less accessible for many countries and organizations. Secondly, pipelines are prone to leaks and spills, which cause environmental degradation and loss of valuable resources. Another disadvantage is the high cost of maintenance, as pipelines require regular inspections and repairs to remain functional. Additionally, pipelines lack flexibility because they are fixed routes, making it impossible to reroute them to new areas without significant costs. Lastly, pipelines are vulnerable to vandalism and theft, especially in regions with poor security, which can disrupt operations and lead to financial losses.

12. Identify four factors that favour the development of tourism in Switzerland.

Switzerland is one of the most popular tourist destinations globally, attracting millions of visitors every year. Several factors contribute to the growth of tourism in the country.

The first factor is its breathtaking natural beauty, including the Swiss Alps, lakes, and picturesque landscapes, which attract nature enthusiasts and adventure seekers. Secondly, Switzerland's excellent infrastructure, such as an efficient transportation network and high-standard accommodations, ensures a seamless experience for tourists. The third factor is the country's rich cultural heritage, featuring traditional music, festivals, museums, and historic sites, which appeal to those interested in art and history. Lastly, political stability and a low crime rate make Switzerland a safe and attractive destination for international travelers.