

**THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATION COUNCIL OF TANZANIA
FORM TWO NATIONAL ASSESSMENT**

013

GEOGRAPHY

Time: 2:30 Hours

ANSWERS

Year: 2024.

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.

1. For each of the items (i) - (x), choose the correct answer from the given alternatives and write its letter in the box provided.

(i) What happens when the Earth casts its shadow on the moon surface?

A Day and Night

B Solar eclipse

C Lunar eclipse

D Eclipse

Answer: C Lunar eclipse

Reason: A lunar eclipse occurs when the Earth is positioned between the sun and the moon, casting its shadow on the moon. Solar eclipse (B) occurs when the moon is between the Earth and the sun. Day and night (A) result from Earth's rotation, and eclipse (D) is a general term.

(ii) A process of moving with livestock from the high land during the summer to the low land during the winter season is known as

A semi-nomadism

B transhumance

C shifting cultivation

D nomadism

Answer: B Transhumance

Reason: Transhumance is the seasonal movement of livestock between highlands and lowlands. Semi-nomadism (A) involves partial settlement, shifting cultivation (C) relates to farming, and nomadism (D) refers to continuous movement.

(iii) Agriculture officer at Mtakuja village advised farmers to reclaim their unproductive land. What is the possible outcome in the area?

A Land degradation

B Decrease in production

C Soil erosion

D Increase in production

Answer: D Increase in production

Reason: Reclaiming unproductive land improves fertility, leading to increased production. Land degradation (A) and soil erosion (C) worsen land quality, and decrease in production (B) is an unlikely result of reclamation.

(iv) Mwana is living in a zone lying between latitudes 10° North and 10° South of the Equator and she always experiences distinct atmospheric circulation system of high and low pressure. Which global pressure belt belongs to that area?

A Equatorial low pressure belt

B Subpolar low pressure belt

C Subtropical high pressure belt

D Polar high pressure belt

Answer: A Equatorial low pressure belt

Reason: The equatorial low-pressure belt is located between 10° North and 10° South. Subpolar low pressure (B) and subtropical high pressure (C) occur further from the equator, while polar high pressure (D) is near the poles.

(v) Which type of transport is not affected by physical barriers?

- A Land transport
- B Road transport
- C Air transport
- D Pipeline transport

Answer: C Air transport

Reason: Air transport is not affected by mountains, rivers, or other physical barriers as it operates above the Earth's surface. Land transport (A), road transport (B), and pipeline transport (D) are constrained by terrain.

(vi) Identify the correct arrangement of the planets:

- A Mercury, Venus, Mars and Earth
- B Venus, Mercury, Mars and Earth
- C Mercury, Venus, Earth and Mars
- D Mars, Mercury, Venus and Earth

Answer: C Mercury, Venus, Earth and Mars

Reason: The correct order of planets from the sun is Mercury, Venus, Earth, and Mars. The other options do not follow the sequence based on their distances from the sun.

(vii) In Western Europe, forests shed their leaves during autumn. Which type of forest is found in that area?

- A Mangrove forest
- B Deciduous forest
- C Tropical Monsoon
- D Equatorial forest

Answer: B Deciduous forest

Reason: Deciduous forests shed leaves during autumn to conserve water. Mangrove forests (A) are found in coastal areas, tropical monsoon forests (C) are found in tropical regions, and equatorial forests (D) are evergreen.

(viii) You have been given a topographical map with representative fraction scale of 1:50,000. Which one is its correct statement scale?

- A One centimeter represents one kilometer
- B One kilometer represents two centimeter
- C Two centimeters represents half kilometer
- D One centimeter represents half kilometer

Answer: A One centimeter represents one kilometer

Reason: In a scale of 1:50,000, one unit on the map equals 50,000 units on the ground. Since 1 kilometer equals 100,000 centimeters, 1:50,000 means 1 centimeter represents 1 kilometer.

(ix) Form Two students visited Coca-Cola Company Limited in Dar es Salaam for a study tour. Identify the type of industry they visited.

- A Chemical industry
- B Metallurgical industry
- C Beverage industry
- D Textile industry

Answer: C Beverage industry

Reason: Coca-Cola produces beverages. Chemical industry (A) involves chemicals, metallurgical industry (B) involves metal processing, and textile industry (D) involves fabrics.

(x) Buzwagi and Shinyanga gold miners prefer mining by drilling the ground vertically. What method of mining do they prefer?

- A Placer mining
- B Underground mining
- C Surface mining
- D In-situ mining

Answer: B Underground mining

Reason: Underground mining involves drilling vertically into the ground. Placer mining (A) is surface-based, surface mining (C) involves removal of top layers, and in-situ mining (D) involves chemical solutions.

2. Match the description of the evidence that the Earth is spherical in List A with the corresponding correct item in List B by writing a correct response below the item number in the table provided.

List A:

- (i) The flag, smoke and chimney will be seen first before the whole boat.
- (ii) Returning to the same point after going around the world.
- (iii) Taken by satellite from the air showing that the Earth is curved.
- (iv) A place where the sky and the land appear to meet and look circular from a high altitude.
- (v) The whole world will have day and night at the same time if the earth was flat.

List B:

- A Lunar eclipse
- B Earth's curved horizon
- C Circumnavigation of the Earth
- D Ship visibility
- E Changing position of polar star
- F Sunrise and sunset
- G Aerial photographs

Answers:

- (i) D Ship visibility

- (ii) C Circumnavigation of the Earth
- (iii) G Aerial photographs
- (iv) B Earth's curved horizon
- (v) F Sunrise and sunset

3. Mr. Stocks is a citizen of the Netherlands engaging in keeping a large number of livestock in an extensive area by using advanced technology.

(a) Identify the scale of production of the livestock keeping practiced by Mr. Stocks.
The scale of production practiced by Mr. Stocks is Commercial livestock farming.

(b) Name two possible products that are obtained from his livestock.

- (i) Milk and dairy products such as butter and cheese.
- (ii) Meat and leather products.

(c) Describe four characteristics of the type of livestock keeping practiced by Mr. Stocks.

- (i) It is large-scale and capital intensive, involving significant investment in advanced technology.
- (ii) It relies on high-quality breeds to maximize productivity and efficiency.
- (iii) It is market-oriented, with products primarily aimed at both local and international markets.
- (iv) The livestock are reared in controlled environments to maintain high productivity.

4. (a) What do you understand by the term continent?

A continent is a large continuous mass of land that is separated from other continents by oceans or other natural boundaries.

(b) Mention seven continents of the world.

- (i) Africa
- (ii) Asia
- (iii) Europe
- (iv) North America
- (v) South America
- (vi) Australia
- (vii) Antarctica

(c) Identify the smallest and largest body of saltwater surrounding the continents.

- (i) The smallest body of saltwater surrounding the continents is the Arctic Ocean.
- (ii) The largest body of saltwater surrounding the continents is the Pacific Ocean.

5. On 31st December 2020, a meteorologist in a weather station recorded a temperature of Dar es Salaam as 36° Centigrade.

(a) Describe three factors which affect the element of weather recorded in the station.

(i) Latitude: Dar es Salaam is near the equator, receiving direct sunlight throughout the year, which increases temperatures.

(ii) Altitude: Being at a low altitude near sea level, the atmospheric pressure is high, leading to warmer temperatures.

(iii) Proximity to the ocean: The Indian Ocean influences the city's climate by moderating temperature fluctuations, although inland areas may experience higher temperatures.

(b) Calculate the annual mean temperature in the area.

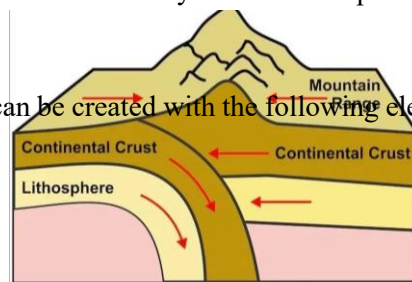
To calculate the annual mean temperature, sum the monthly average temperatures and divide by 12. Provide the monthly temperature data if calculation is required.

$$= 36/12$$
$$= 3^{\circ} \text{ C}$$

6. With the aid of a diagram briefly describe how fold and block mountains are formed.

(a) Fold mountain

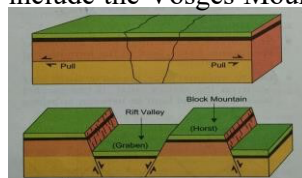
Fold mountains are formed when two tectonic plates collide. This collision causes the layers of sedimentary rock that have accumulated in the geosynclines to compress and fold upwards. The upward folds are called anticlines, and the downward folds are called synclines. Examples of fold mountains include the Himalayas and the Andes.



A diagram for fold mountains can be created with the following elements:

(b) Block mountain

Block mountains are formed when large areas of the Earth's crust are lifted, tilted, or dropped between fault lines due to tensional forces. The uplifted blocks form the mountains, while the lowered blocks form rift valleys. Examples of block mountains include the Vosges Mountains in France and the Sierra Nevada in the USA.



7. (a) What do you understand by the term tourist attraction?

A tourist attraction is a place or feature that draws visitors due to its cultural, historical, natural, or recreational significance. These attractions can include landmarks, wildlife parks, beaches, or unique events.

(b) Outline three historical sites found in Tanzania.

(i) Olduvai Gorge – A significant archaeological site showcasing early human evolution.

(ii) Bagamoyo – An ancient coastal town known for its role in the slave trade.

(iii) Kilwa Kisiwani – A UNESCO World Heritage site with ruins of a medieval Swahili city.

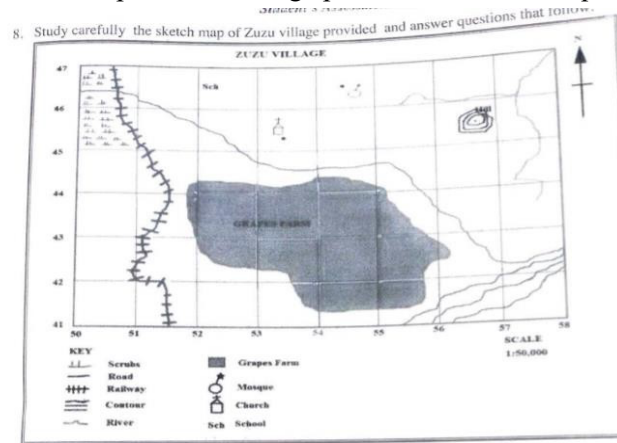
(c) Identify three negative impacts of tourism.

(i) Environmental degradation due to overuse of natural resources and pollution.

(ii) Cultural erosion as traditional customs and values are influenced by foreign visitors.

(iii) Economic inequality, where tourism benefits are unevenly distributed, often favoring large companies over local communities.

8. Study carefully the sketch map of Zuzu village provided and answer questions that follow:



(a) Using a tracing method, calculate the area covered by Grapes Farm in Km².

a) Place a tracing paper over the map and outline the area of the Grapes Farm.

b) Divide the outlined area into smaller grid squares (e.g., 1 cm²).

c) Count the full squares and estimate the partially covered squares.

d) Use the map scale (1:50,000) to convert the area of each square into actual ground area. For instance, 1 cm² on the map equals 0.25 km².

e) Sum the calculated areas to get the total area covered by Grapes Farm.

(b) Calculate the length of the railway from grid reference 506476 to 515415 in Km.

a) Use a ruler to measure the distance between the two grid references on the map in centimeters.

b) Convert the measured distance using the map scale (1:50,000). For example, 1 cm on the map equals 0.5 km on the ground.

c) Multiply the measured distance by 0.5 to get the actual ground distance in kilometers.

(c) Convert the given fractional map scale into statement scale.

The fractional scale 1:50,000 means that 1 unit on the map equals 50,000 units on the ground. In statement scale, this can be written as:

1 cm on the map represents 0.5 km on the ground.

Here are the answers:

9. (a) Name the major climatic regions in Africa.

- (i) Equatorial climate
- (ii) Tropical climate
- (iii) Desert climate
- (iv) Mediterranean climate

(b) Which type of climate dominates a large part of Africa?

The tropical climate dominates a large part of Africa.

(c) Mention three human activities which are influenced by the type of climate identified in (b).

- (i) Agriculture, as the tropical climate provides suitable conditions for growing crops like maize, cassava, and bananas.
- (ii) Livestock keeping, as the grasslands in tropical regions support grazing animals.
- (iii) Tourism, as the tropical climate supports attractions like wildlife safaris and beach tourism.

10. Analyse five ways of improving large-scale agriculture in Tanzania.

- Use of modern farming equipment: Introduce advanced machinery like tractors and harvesters to improve efficiency.
- Irrigation development: Establish irrigation schemes to reduce dependency on unreliable rainfall.
- Fertilizer and pesticide use: Provide affordable and accessible fertilizers and pesticides to improve soil fertility and control pests.
- Research and development: Invest in agricultural research to introduce improved seed varieties and farming techniques.
- Infrastructure development: Improve roads and storage facilities to ensure efficient transportation and preservation of agricultural produce.