SMZ

ZANZIBAR EXAMINATIONS COUNCIL

FORM THREE ENTRANCE EXAMINATION

031 GEOGRAPHY

Time: 2:30 Hours ANSWERS monday, 08th November 2015.

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)** mark s.
- 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. Choose the correct answer by writing its letter in the bracket provided. i) The earth is slightly flattened at the A: Centre B: Poles C: Sphere D: Globe Answer: B: Poles The earth's shape is an oblate spheroid, slightly flattened at the poles due to rotation. ii) A planet in the solar system with the nearest orbit around the sun is A: Neptune B: Venus C: Mars D: Mercury Answer: D: Mercury Mercury is the closest planet to the sun, with the shortest orbit. iii) The natural satellite of the Earth is A: Sun B: Star C: Pluto D: Moon Answer: D: Moon The moon is Earth's only natural satellite. iv) An angle of inclination of the on its axis is A: 66½° B: 60° C: 90°S D: 23½°S Answer: A: 66½° The Earth's axis is tilted at an angle of $66\frac{1}{2}^{\circ}$ to the plane of its orbit. v) Tides are highest A: At the equator B: During the aphelion

Tides are highest during equinox when the gravitational pull of the sun and moon align with the Earth's

C: During equinoxD: During the eclipse

equator.

Answer: C: During equinox

- vi) The most common form of precipitation in East Africa is
- A: Haze
- B: Snow
- C: Hail
- D: Rain

Answer: D: Rain

Rain is the most common form of precipitation in East Africa due to the region's tropical climate.

- vii) The feature which is described as tableland is
- A: Plateau
- B: Basin
- C: Mountain
- D: Plain

Answer: A: Plateau

Plateaus are elevated flat areas commonly referred to as tablelands.

- viii) The world's largest ocean is
- A: Arctic Ocean
- B: Pacific Ocean
- C: Indian Ocean
- D: Atlantic Ocean

Answer: B: Pacific Ocean

The Pacific Ocean is the largest ocean, covering about one-third of the Earth's surface.

- ix) Found between 5° North and 5° South of the equator
- A: Hot desert climate
- B: Mediterranean climate
- C: Savanna climate
- D: Equatorial climate

Answer: D: Equatorial climate

This region is characterized by high temperatures and heavy rainfall throughout the year.

- x) The deepest valley in the world is
- A: The Great Rift Valley
- B: Himalaya
- C: Bentley Trench
- D: Afar Depression

Answer: C: Bentley Trench

The Bentley Subglacial Trench in Antarctica is the world's deepest valley.

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

Column A:

- i. Cartography
- ii. Galaxy
- iii. Orbit
- iv. Stevenson's screen
- v. High and low tides
- vi. Equator
- vii. Suez Canal
- viii. Winter
- ix. Equinox
- x. Renewable resources

Column B:

- A: Path of the earth around the sun
- B: Exhaustible resources
- C: Equal day and night
- D: The science of making maps
- E: Joint of Africa and Asia
- F: The science of study maps
- G: A group of stars
- H: Inexhaustible resources
- I: Latitude which is a great circle
- J: Joint of North America and South America
- K: Weather station instrument shelter
- L: The coldest season
- M: Instrument used to measure waves
- N: Result of the rotation of the earth
- O: The warmest season

Answers:

- i. D The science of making maps.
- ii. G A group of stars, such as the Milky Way.
- iii. A Path of the earth around the sun.
- iv. K A weather station instrument shelter.
- v. N Result of the rotation of the earth.
- vi. I Latitude which is a great circle.
- vii. E Joint of Africa and Asia.
- viii. L The coldest season.
- ix. C Equal day and night.
- x. H Resources that are replenished naturally.

- 3. In the following statements write T if the statement is true and F if the statement is false.
- i) Mercury is one of the planets of the solar system.

Answer: T

ii) Solar energy occurs when the earth passes between the moon and the sun.

Answer: F

Solar energy is generated by the sun, not by the positioning of celestial bodies.

iii) Air moves from cooler regions to warmer regions because of the difference in pressure.

Answer: T

iv) Kilimanjaro mountain is a good example of a fold mountain.

Answer: F

Mount Kilimanjaro is a volcanic mountain, not a fold mountain.

v) Crater is found at the top of fold mountains.

Answer: F

Craters are found at the top of volcanic mountains, not fold mountains.

vi) Latitudinal circles are not of the same circle.

Answer: F

Latitudinal circles are parallel and remain equidistant from each other.

vii) A monsoon climate has temperatures above 34°C.

Answer: F

Monsoon climates typically have moderate temperatures with heavy seasonal rainfall.

viii) The International Date Line follows the longitude 0°.

Answer: F

The International Date Line is located at approximately 180° longitude.

ix) Marianas Trench is the deepest part of the ocean.

Answer: T

x) Air moves from cooler regions to warmer regions because of the difference in pressure.

Answer: T

- 4. Answer the following questions in short form.
- a) What are the characteristics of savanna climate? (Give any three characteristics)
- i. Alternating wet and dry seasons

The savanna climate experiences distinct rainy and dry periods annually.

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ii. Moderate rainfall

Rainfall ranges from 500 mm to 1200 mm annually, supporting grasslands and scattered trees.

iii. High temperatures

Temperatures remain high throughout the year, typically ranging between 20°C and 30°C.

b) Distinguish the following terms:

Weather and climate

Weather refers to the day-to-day atmospheric conditions in a specific area, while climate is the average weather pattern of a region over a long period.

- c) If the maximum temperature recorded in an area is 29°C and the minimum temperature is 17°C:
- i. Find the mean daily temperature.

Answer: $(29 + 17) \div 2 = 23^{\circ}$ C

The mean daily temperature is 23°C.

ii. Find the daily range temperature.

Answer: $29 - 17 = 12^{\circ}$ C

The daily range of temperature is 12°C.

- 5. a) List down three conditions that fulfill the heavenly body to be called a planet.
- i. Must orbit a star

Planets revolve around a central star, such as the sun.

ii. Must be spherical in shape

A planet's gravity pulls it into a rounded form.

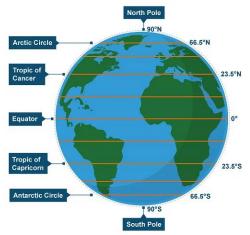
iii. Must clear its orbit

A planet's gravitational force dominates its orbital zone by clearing debris and smaller objects.

- b) "Solar energy is the chief source of energy for life". Show how solar energy emancipated African women.
- Solar energy reduces reliance on firewood, freeing women from the time-consuming task of collecting it.
- Solar-powered lighting allows women to extend productive hours for education and economic activities.
- Solar energy powers irrigation systems, improving agricultural productivity and reducing labor.
- It reduces indoor air pollution caused by burning firewood, improving women's health.
- c) Draw a clear diagram showing the five important parallels of the earth.

Answer:

- 1. The Equator (0°)
- 2. Tropic of Cancer (23½° N)
- 3. Tropic of Capricorn (23½° S)
- 4. Arctic Circle (66½° N)
- 5. Antarctic Circle (66½° S)



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- 6. Study carefully Map I (Sketch Map of Tanga), then answer the questions that follow:
- a) By using the place name method, point out the position of any three parts shown on the map.
- i. Tanga Located in the northeastern part of the map.
- ii. Korogwe Found towards the central part of the map.
- iii. Muheza Positioned between Tanga and Korogwe on the map.
- b) Distance of the Korogwe-Tanga road on a map is 10cm. Find the distance in km.

Scale = 1:200,000 (1cm represents 2km)

 $10cm \times 2km = 20km$

Answer: The distance between Korogwe and Tanga is 20km.

c) Identify the method/s used to express the map scale in Map 1.

Answer: The map scale is expressed using a representative fraction (1:200,000) and a linear scale.

- d) Write down four uses of maps.
- i. To locate geographical features like rivers, mountains, and towns.
- ii. To measure distances between places.
- iii. To plan transportation routes and infrastructure development.
- iv. To study land use and resource distribution.
- e) Suppose 1cm represents 2km. Use the given scale to draw a linear scale and show its important features.

Answer: A linear scale should be drawn with intervals of 2km, and labeled 0, 2, 4, 6, 8, 10 km.

- f) Show any three methods used to measure irregular areas on a map.
- i. Grid square method
- ii. Tracing and transferring method
- iii. Use of a planimeter
- 7. Explain the characteristics of small-scale agriculture.

Small-scale agriculture refers to farming practices conducted on small plots of land, primarily for household consumption, using minimal resources and simple tools.

Characteristics of small-scale agriculture:

- Small land size: Farmers typically operate on small plots, often less than two hectares, which are easier to manage with limited resources.
- Manual labor: Most farming activities rely on human labor rather than machinery, as advanced equipment is often unaffordable or unavailable.
- Subsistence farming: The primary focus is to produce food for family consumption, with only surplus produce sold in local markets.
- Use of simple tools: Farmers use basic tools such as hoes, spades, and machetes, which require low investment and maintenance.
- Mixed cropping: Multiple crops are grown on the same piece of land to maximize land use and reduce risks associated with crop failure.

8. Explain the advantages of road transport.

Road transport involves the movement of goods and people using vehicles like cars, buses, and trucks on roads. It is widely used due to its convenience and accessibility.

Advantages of road transport:

- Accessibility: Roads connect urban, rural, and remote areas, ensuring that people and goods can move to and from places that lack other transport modes.
- Flexibility: Road transport allows for flexible routes and schedules, catering to varying demands and emergencies.
- Door-to-door service: Goods or passengers are transported directly to their destination, eliminating the need for additional transfers.
- Cost-effectiveness: For short distances and small loads, road transport is economical compared to rail or air transport.
- Speed for short distances: Road transport is efficient for short-distance travel, particularly for perishable goods and urgent deliveries.

9. Examine the benefits of the Rufiji Basin Development Authority.

The Rufiji Basin Development Authority (RUBADA) is an initiative aimed at utilizing the Rufiji River Basin's resources to promote economic growth and improve the livelihoods of local communities.

Benefits of the Rufiji Basin Development Authority:

- Hydroelectric power generation: The basin supports projects that generate electricity, contributing to the national grid and enhancing energy access.
- Irrigation development: The basin provides water for large-scale irrigation projects, increasing agricultural productivity and food security.
- Employment creation: Construction and maintenance of infrastructure in the basin create job opportunities for local residents.

- Flood control: The project helps manage seasonal flooding, protecting homes, farmlands, and infrastructure.
- Tourism promotion: The basin's natural beauty and infrastructure attract tourists, boosting local economies through revenue generation.
- 10. a) Describe four problems associated with exploitation of forest resources.

Exploitation of forest resources refers to the excessive or unsustainable use of forest products, including timber, fuelwood, and non-timber resources.

- Deforestation: Excessive logging and clearing of forests for agriculture, urbanization, or infrastructure lead to the loss of forest cover and biodiversity.
- Soil erosion: The removal of trees exposes soil to wind and water erosion, reducing soil fertility and affecting agricultural productivity.
- Climate change: Forest exploitation reduces the ability of trees to absorb carbon dioxide, contributing to global warming and climate change.
- Loss of habitat: Unsustainable forest use destroys habitats for wildlife, leading to a decline in species populations and ecosystem imbalances.
- b) Point out two possible measures to overcome the problems associated with forest exploitation.
- Reforestation and afforestation: Planting new trees in deforested or degraded areas helps restore forest cover and maintain ecological balance.
- Enforcement of conservation laws: Implementing strict policies and penalties for illegal logging and promoting sustainable forestry practices can reduce overexploitation.
- 11. Analyze the factors influencing the location of industries.

The location of industries is determined by various factors that affect production, cost, and accessibility.

- Availability of raw materials: Industries often locate near raw material sources to reduce transportation costs, such as sugar factories near sugarcane plantations.
- Access to markets: Proximity to consumers ensures reduced distribution costs and faster delivery of goods.
- Availability of labor: Industries require skilled and unskilled labor, which influences their location near populated areas.
- Infrastructure: Good transport networks, reliable energy supply, and communication systems are critical for industrial operations.
- Government policies: Tax incentives, subsidies, and industrial zoning by governments encourage industries to set up in specific areas.
- 12. Explain the contribution of tourism in Tanzania.

Tourism in Tanzania is a major contributor to the economy and plays a vital role in socio-economic development.

- Revenue generation: Tourism is a significant source of foreign exchange, contributing to national income.
- Employment creation: The tourism sector provides jobs in hotels, transport, and guiding services, reducing unemployment.

- Cultural preservation: Tourism promotes the protection and showcasing of Tanzania's rich cultural heritage and traditions.
- Infrastructure development: The need to accommodate tourists leads to improved roads, airports, and communication systems.
- Environmental conservation: Tourism funds conservation efforts for national parks and wildlife, protecting biodiversity.