SMZ

ZANZIBAR EXAMINATIONS COUNCIL

FORM THREE ENTRANCE EXAMINATION

031 **GEOGRAPHY**

Time: 2:30 Hours **ANSWERS** **monday, 08th November 2016.**

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 from the given alternatives by writing its letter in the table provided.

i) The ability to do something
A: Coal
B: Aluminium
C: Energy
D: Power
Answer: C: Energy
Energy is defined as the capacity to do work or perform tasks.

ii) The moon moves around the earth from
A: East to South
B: North to West
C: East to West
D: West to East
Answer: C: East to West
The moon revolves around the Earth in a westward direction, appearing to move from east to west in the sky.

iii) The third largest continent in the world is
A: Asia
B: North America
C: South America
D: Africa
Answer: B: North America
North America is the third largest continent by area, after Asia and Africa.

iv) If the local time at village Q (39°E) is 8:00 am, what will be the local time at village T (55°W)?
A: 2:00 am
B: 2:00 pm
C: 8:00 am
D: 8:00 pm
Answer: A: 2:00 am
The time difference between 39°E and 55°W is 6 hours, with 55°W being behind.

v) An instrument kept in Stevenson Screen at a weather station is
A: Wind gauge
B: Hygrometer
C: Campbell Stokes sunshine recorder
D: Rain gauge
Answer: B: Hygrometer
A hygrometer, which measures humidity, is commonly kept in a Stevenson Screen.

vi) Trees characterized with needle-like leaves
A: Mangrove forests
B: Tropical forests
C: Coniferous forests
D: Natural forests
Answer: C: Coniferous forests
Coniferous trees are adapted to cold climates and have needle-like leaves to reduce water loss.

vii) Type of local winds blowing from the sea to the land during the day
A: Sea breezes
B: Monsoon winds
C: Trade winds
D: Land breezes
Answer: A: Sea breezes
Sea breezes occur during the day as cooler air from the sea replaces the rising warm air over land.

viii) The summer solstice in the southern hemisphere is
A: On 21st June
B: On 22nd December
C: On 23rd September
D: On 12th January
Answer: B: On 22nd December
The southern hemisphere experiences the summer solstice on 22nd December when the sun is directly over the Tropic of Capricorn.

ix) A study of the map and research
A: Surveying
B: Practical geography
C: Physical geography
D: Ecosystem
Answer: A: Surveying
Surveying involves the study and measurement of geographical features on maps and the ground.

x) The diameter of the earth from North Pole to South Pole is approximately
A: 12,713 km
B: 14.88 km
C: 12,756 km
D: 40,075 km
Answer: A: 12,713 km
The polar diameter of the Earth is approximately 12,713 km.

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

COLUMN A:
i) Astronomy
ii) Perihelion
iii) The core
iv) Stars
v) Saturn
vi) Salinity
vii) Asteroid belt
viii) Axis
ix) Valley slopes
x) Penumbra

COLUMN B:
A: Central imaginary line of a planet
B: Nearest position of the earth from the sun
C: Lunar eclipse
D: Found between Mars and Jupiter
E: State of having amount of calcium
F: Sides of the valley
G: Having and transmit their own light
H: Solar eclipse
I: Found between Earth and Mars
J: Farthest position of the earth from the sun
K: The inner most layer of the sun
L: Scientific study of the components of the solar system
M: The outer most layer of the sun
N: Has eighteen satellites

Answers:
i. L - Scientific study of the components of the solar system
ii. B - Nearest position of the earth from the sun
iii. K - The inner most layer of the sun
iv. G - Having and transmit their own light
v. N - Has eighteen satellites
vi. E - State of having amount of calcium
vii. D - Found between Mars and Jupiter
viii. A - Central imaginary line of a planet
ix. F - Sides of the valley
x. C - Lunar eclipse

3. In the following statements write "T" if the statement is correct and "F" if the statement is incorrect.

i) Earth rotates from East to West on its orbit.
Answer: F

ii) The Greenwich Meridian passes through a town in England.
Answer: T

iii) Ruwenzori is a good example of Fold Mountain in South Africa.
Answer: F

iv) Temperature and rainfall can be influenced by latitude.
Answer: T

v) Stratus and nimbostratus are the examples of low cloud.
Answer: T
vi) Jupiter is a unique planet because it has rings around it.
Answer: F
Jupiter is not unique for having rings; Saturn is most known for its prominent rings.

vii) Standard time is used by the countries looking to the same time zone.
Answer: T
Countries within the same time zone use standard time for uniformity in schedules and activities.

viii) Active volcanoes are active but do not erupt for a long time.
Answer: F
Active volcanoes are those that have erupted recently or show signs of potential future eruptions.

ix) Dolomites is a high pressure belt.
Answer: F
The Dolomites are a mountain range, not a pressure belt.

x) Meteors are small planetary bodies around the sun.
Answer: T
Meteors are small celestial objects that orbit the sun and sometimes enter the Earth's atmosphere.

4. a) What is an island?
An island is a landmass surrounded by water on all sides and smaller than a continent.

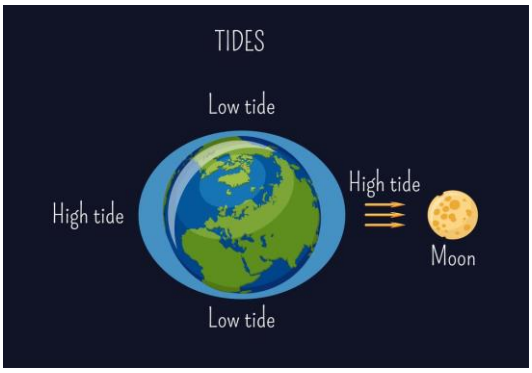
b) Identify three types of islands.
i. Continental islands
ii. Oceanic islands
iii. Coral islands

c) Choose one type of island and explain about it.
Continental islands: These are islands that were once connected to a continent but became separated due to rising sea levels or geological activity. Examples include Madagascar and Greenland.

5. a) Define a valley.
A valley is a long and fairly narrow stretch of lowland that lies between hills, mountains, or plains.

b) Give two evidence showing that the Earth is spherical.
i. During a lunar eclipse, the Earth's shadow on the moon is always circular, which is possible only if the Earth is spherical.
ii. Ships appear to sink gradually below the horizon as they move away, indicating the curvature of the Earth's surface.

c) Draw a clear diagram to show high and low tides.



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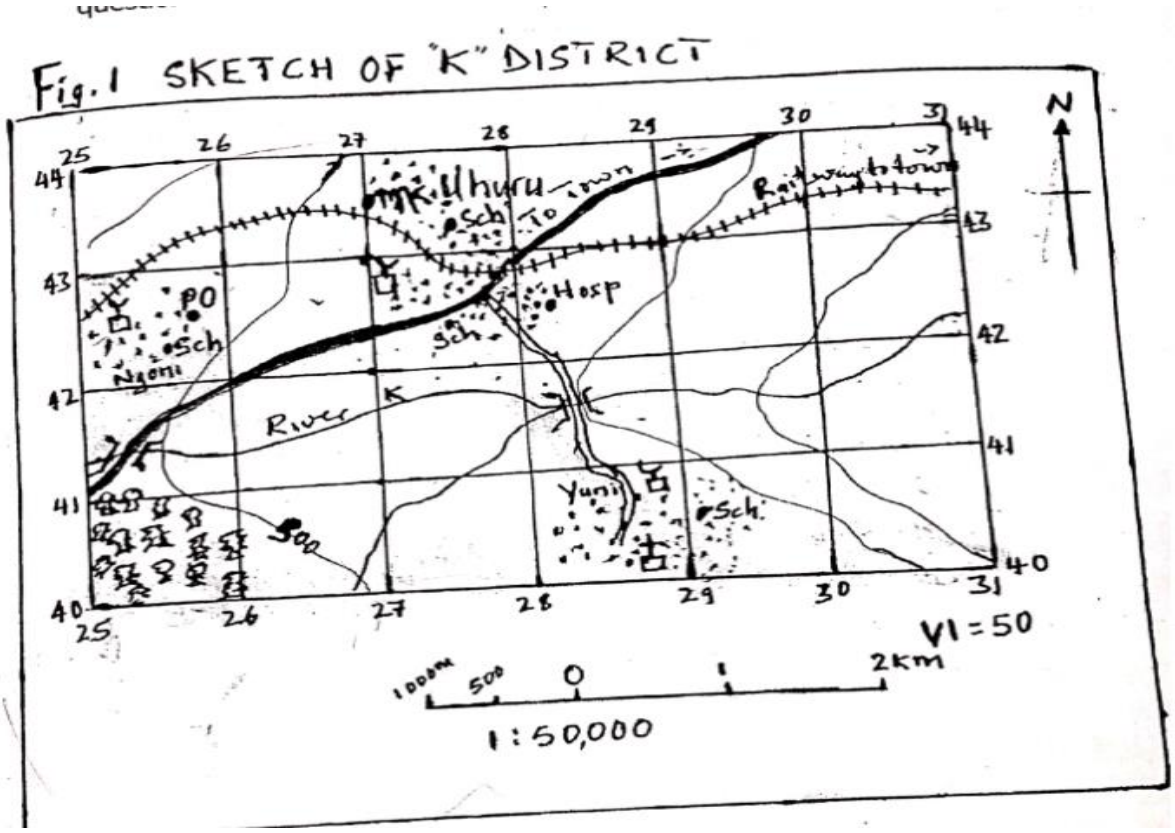
A diagram include the following:
- A representation of the Earth, moon, and sun.
- High tide zones aligned with the moon due to gravitational pull.
- Low tide zones perpendicular to the high tide areas.

6. Study careful figure I (ketch map - k district) then answer the questions that follow:



a) By using six-figure grid references, give the positions of the following objects:
i. Uhuru hospital
Answer: 274426
Uhuru hospital is located within the grid square starting at 27 (easting) and 42 (northing).

ii. Yuni school
Answer: 307417
Yuni school is found in the grid square starting at 30 (easting) and 41 (northing).

iii. Ngoni Post Office
Answer: 265433
Ngoni Post Office is located in the grid square starting at 26 (easting) and 43 (northing).

iv. Uhuru market
Answer: 284423
Uhuru market is situated in the grid square starting at 28 (easting) and 42 (northing).
These references are determined by the intersections of the grid lines on the map.

b) Describe any two components of the maps shown on map (Fig.1).
- Latitude and Longitude: These are imaginary lines used to identify specific locations on the map. Latitude lines run horizontally, while longitude lines run vertically.
- Grid Reference System: This is a network of intersecting lines used to pinpoint precise locations on the map.

c) Draw a key that can be useful to interpret any six objects on the map (Fig.1).
The key should include symbols for:

- Hospital (e.g., cross sign)
- School (e.g., open book symbol)
- Post Office (e.g., envelope symbol)
- Market (e.g., basket symbol)
- Roads (e.g., solid or dashed lines)
- Rivers (e.g., wavy blue line)

7. a) Give three properties of a statement scale.
- Direct representation: It gives a direct relationship between map distance and ground distance, e.g., 1cm represents 1km.
- Easily understandable: It is simple to interpret for users who know the scale ratio.
- Fixed ratio: The scale remains constant across the entire map, maintaining proportional accuracy.

b) i. Define the term small scale map.
A small scale map is a map drawn using a small scale, showing a large area with limited details.

ii. Identify the type of map scale according to their sizes in the following:
1: 100,000 - Large scale map
1: 350,000 - Medium scale map

c) Differentiate between a grid system and grid reference as used on a map.
- Grid system: Refers to the entire network of intersecting latitude and longitude lines covering the map.
- Grid reference: Refers to a specific alphanumeric or numeric combination used to locate a point within the grid system.

8. a) Write short notes on the following terms:

i. Plantation agriculture
Plantation agriculture involves the large-scale production of a single crop, such as coffee, tea, or sugarcane, primarily for commercial purposes. It typically requires significant capital investment, advanced machinery, and a substantial labor force. This form of agriculture is most common in tropical and subtropical regions and contributes significantly to exports and economic development.

ii. Commercial livestock keeping

Commercial livestock keeping is the large-scale rearing of animals, such as cattle, sheep, or poultry, for the purpose of producing meat, milk, wool, or other products for sale. It is characterized by modern methods, such as the use of veterinary services, improved breeds, and advanced feeding systems. This practice focuses on maximizing production and profitability and is common in both developed and developing countries.

b) Compare between livestock keeping in Tanzania and Australia (Give at least four comparisons).
Livestock keeping in Tanzania is predominantly subsistence-based, with farmers keeping small herds for family consumption and cultural purposes. In contrast, livestock keeping in Australia is highly commercialized, focusing on large-scale meat and wool production for export markets. Tanzanian livestock keepers often use traditional grazing systems, while Australian farmers rely on modern ranching and rotational grazing techniques. Veterinary care in Tanzania is limited and less accessible compared to Australia, where advanced veterinary practices ensure animal health and productivity. Additionally, climatic differences influence livestock keeping; Tanzania's tropical climate supports diverse grazing systems, whereas Australia's arid conditions necessitate irrigation and supplementary feeding.

9. Explain the forms of pollutants from manufacturing industries.
Manufacturing industries produce various types of pollutants that harm the environment and human health. Air pollutants, such as carbon monoxide, sulfur dioxide, and particulate matter, result from the burning of fossil fuels and contribute to respiratory diseases and global warming. Water pollutants, including chemical effluents, heavy metals, and untreated waste, are discharged into rivers and lakes, affecting aquatic ecosystems and contaminating drinking water sources. Solid waste, such as plastics and industrial by-products, accumulates in landfills, leading to soil pollution and loss of biodiversity. Noise pollution from heavy machinery and transport vehicles disrupts wildlife and causes hearing problems for people living near industrial zones.

10. a) What do you understand by the term eco-tourism?
Eco-tourism refers to a sustainable form of tourism that emphasizes the conservation of natural environments and the well-being of local communities. It focuses on minimizing the negative impacts of tourism by promoting responsible travel, environmental awareness, and respect for local cultures. Activities like wildlife safaris, visits to national parks, and participation in conservation projects contribute to preserving biodiversity while generating income for local communities.

b) Tourism industry in Tanzania has been encouraged by a number of factors. Analyse any four factors for the development of this sector.
Tourism in Tanzania has been supported by the country's rich biodiversity, including iconic wildlife such as elephants, lions, and giraffes, which attract visitors to parks like Serengeti and Ngorongoro. The country's unique cultural heritage, with traditional dances, crafts, and historical sites such as Kilwa Kisiwani, appeals to international tourists. Tanzania's stable political environment and government policies, such as investment in infrastructure and tax incentives for tourism businesses, have further boosted the sector. Additionally, the promotion of eco-tourism has attracted environmentally conscious travelers, supporting sustainable development and conservation efforts.

11. Describe various ways for water resource conservation.
Water resource conservation can be achieved through rainwater harvesting, where rainwater is collected and stored for later use, reducing reliance on surface water sources. Reforestation and afforestation protect water catchment areas and improve groundwater recharge. The use of efficient irrigation methods, such as drip irrigation, minimizes water wastage in agriculture. Treating and reusing wastewater for industrial or agricultural purposes reduces the demand for fresh water. Educating communities about water conservation practices, such as turning off taps when not in use, further promotes sustainable water management.

12. Explain five advantages of oil production in the Middle East.
Oil production in the Middle East generates significant revenue, contributing substantially to the GDP of oil-producing nations and funding national development projects. The oil industry creates numerous employment opportunities in extraction, refining, and related sectors, boosting local economies. Oil exports strengthen trade relations with other countries, ensuring economic stability and geopolitical influence. Revenue from oil allows investment in infrastructure, such as roads, schools, and hospitals, improving the quality of life for citizens. Additionally, the strategic importance of oil reserves gives Middle Eastern countries a strong bargaining position on the global stage.