THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
DIPLOMA IN SECONDARY EDUCATTION EXAMINATION

713 **GEOGRAPHY**

Time: 3 Hours **ANSWERS** **Year: 2023**

Instructions.

1. This paper consists of sections A and B with a total of **Fourteen (14)** questions.
2. Answer **all** questions from section A and **four (4)** questions from section B.
3. Section A carries **forty (40)** marks and section B Carries **sixty (60)** marks.
4. Cellular phones are **note** allowed in the examination room.
5. Write your **examination Number** on every page of your answer booklet(s).

SECTION A (40 Marks)

Answer all questions from this section. Each question carries 4 marks.

1. Support the statement that "the success of agricultural activities in the equatorial region depends on the presence of soil water throughout the year."

Agricultural activities in the equatorial region rely on the continuous availability of soil water because the climate is typically hot and humid, causing high rates of evaporation. Without constant soil moisture, crops would wilt and yields would drastically drop.

Equatorial crops such as cocoa, rubber, bananas, and oil palm require water consistently for cell processes like photosynthesis, nutrient transportation, and maintaining turgor pressure. These functions cannot be sustained without sufficient soil water throughout the year.

The fertility of equatorial soils often depends on the rapid decomposition of organic matter, a process driven by constant moisture. Soil water ensures the continuous breakdown of organic materials, making nutrients available to crops regularly.

In addition, farmers in equatorial regions usually cultivate their fields throughout the year without a defined dry season. Continuous soil moisture supports this year-round farming, avoiding the fallow periods necessary in regions with distinct dry seasons.

2. Support by giving examples, the statement that "different landforms seen today are chiefly a result of two geomorphic processes."

The landforms we see today result mainly from erosional and depositional processes. Erosion involves the removal and transportation of materials by agents like water, wind, ice, and waves. Examples include valleys carved by rivers, cliffs formed by coastal wave action, and canyons like the Grand Canyon in the USA.

Deposition is the laying down of materials carried by these agents. River deltas such as the Nile Delta in Egypt and the Mississippi Delta in the USA are classic depositional landforms created by river sediment settling as water loses energy.

Mountains and rift valleys form through tectonic uplift, but their shapes are later modified by erosion and deposition. For example, Mount Kilimanjaro's slopes are shaped by glacial erosion and debris deposition.

Wind deposition also forms landforms like sand dunes in deserts, while glaciers deposit moraines and outwash plains, transforming landscapes through these geomorphic processes.

3. Substantiate, by giving four points the statement that "world climates differ based on the latitude they are located in."

At the equator, high solar radiation causes consistently high temperatures and abundant rainfall throughout the year, leading to a hot and wet equatorial climate suitable for rainforests.

Moving towards the tropics, the intensity of solar radiation decreases, resulting in tropical climates with distinct wet and dry seasons, such as the savannah and monsoon regions.

In temperate latitudes, moderate solar radiation produces climates with four distinct seasons: summer, autumn, winter, and spring. Countries like the USA and much of Europe experience this seasonal variation.

At high latitudes near the poles, minimal solar radiation creates cold climates like the tundra and polar regions, where temperatures remain low and precipitation is scarce, mostly falling as snow.

4. Suggest solutions to the negative impact of the tourism industry in Tanzania.
Implementing strict environmental regulations in tourism destinations can reduce pollution, habitat destruction, and overexploitation of natural resources caused by large tourist numbers.

Community-based tourism should be promoted to ensure that local people directly benefit from tourism through employment and investment in local services, reducing social inequalities.

The government should control the number of visitors to sensitive ecological sites such as national parks and marine reserves by setting limits to avoid overuse and degradation.

Educational campaigns for tourists about conservation and respect for local cultures can minimize irresponsible behaviors that lead to environmental and social problems in tourist areas.

5. Oppose the statement that, "studying Geography is irrelevant."
Geography equips learners with knowledge about the environment and natural resources, helping societies manage and conserve these resources sustainably, which is essential in today's world.

It provides skills in map reading, data interpretation, and spatial analysis, valuable for careers in planning, surveying, environmental management, and disaster preparedness.

Geography fosters global awareness and cultural understanding, enabling people to appreciate the diversity of societies, economies, and environments, which is crucial in a connected world.

The subject informs people about environmental challenges like climate change, deforestation, and urbanization, enabling them to contribute to solutions and informed decision-making.

6. Elaborate on the benefits of classroom observation as an assessment strategy in Geography.
Classroom observation allows teachers to directly assess students' participation, engagement, and understanding of concepts, providing immediate feedback for instructional adjustments.

It enables teachers to identify learning difficulties or misconceptions in real time, so corrective measures can be taken before misunderstandings become entrenched.

Observing students during practical activities like map reading or group discussions provides insight into their skills application, teamwork, and problem-solving abilities.

It also helps in monitoring the effectiveness of teaching methods and classroom management strategies, ensuring lessons remain interactive, inclusive, and productive.

7. An expert in environmental conservation visited Kagororo village. In his speech to the villagers he noted that "the overuse of fuel wood by the villagers is like digging their own graves." Support what the expert said using four points.

Excessive cutting of trees for fuel wood leads to deforestation, which reduces forest cover and weakens the ecosystem's ability to regulate climate, absorb carbon dioxide, and sustain biodiversity.

Loss of trees causes soil erosion, as there are no roots to hold soil particles together. This results in declining soil fertility, reduced crop yields, and food insecurity.

Deforestation due to fuel wood collection can also lead to the drying up of rivers and water sources, affecting both domestic and agricultural water availability.

The continued overuse of fuel wood contributes to indoor air pollution from smoke, causing respiratory problems and posing serious health risks, especially for women and children.

8. Present four key preparations that precede the actual teaching.
A teacher must review the syllabus and scheme of work to determine the specific topics, objectives, and expected competencies for the lesson.

Selecting suitable teaching and learning resources like maps, diagrams, and textbooks is essential to ensure materials are available and appropriate for the lesson content.

Preparing a detailed lesson plan outlining the introduction, development, conclusion, and assessment procedures helps maintain organization and time management.

Lastly, arranging the physical classroom environment, including seating arrangements and equipment setup, ensures a smooth and effective teaching process.

9. Differentiate ground photographs from vertical photographs.
Ground photographs are taken from a camera positioned at ground level, either horizontally or at an angle, capturing images of landscapes, people, or structures from a human-eye perspective.

Vertical photographs are taken from an aerial position with the camera lens pointing directly downward, producing images suitable for mapping, land-use planning, and environmental surveys.

10. Assist the teacher in fulfilling his/her intention of understanding geodetic surveying, topographic surveying, engineering surveying, and cadastral surveying.
Geodetic surveying involves measuring large areas of the earth's surface while accounting for the earth's curvature, often used for national mapping and positioning systems.

Topographic surveying focuses on capturing both natural and artificial features of the landscape, such as hills, rivers, roads, and buildings, along with their elevations and positions.

Engineering surveying is carried out to guide the design and construction of infrastructure projects like roads, bridges, dams, and buildings, ensuring accurate site measurements.

Cadastral surveying deals with establishing and recording property boundaries for legal and land ownership purposes, providing evidence in land disputes and land registration systems.

SECTION B (60 Marks)

Answer all questions from this section. Each question carries 15 marks.

11. Provide five points to support the following statement: "Although the African continent has great potentials for hydroelectric power production, the exploitation of such potentials to the maximum is still a challenge."

Many African countries lack the financial resources and technical expertise required for constructing, maintaining, and expanding large hydroelectric projects. The high initial capital costs of building dams, turbines, and transmission lines have limited the exploitation of available hydroelectric potential.

Political instability and insecurity in some regions make it difficult to plan, invest in, and safely operate large hydroelectric power stations. Conflicts and government transitions often delay or halt energy projects before they are completed.

Environmental concerns and opposition from communities living near potential dam sites have also slowed hydroelectric expansion. Flooding of villages, displacement of people, and destruction of ecosystems often spark resistance, making it hard to fully exploit hydroelectric potential.

Seasonal variability in river flow, caused by irregular rainfall patterns and the effects of climate change, makes hydropower generation unreliable in some areas. Periodic droughts reduce water levels, affecting the consistency of electricity supply.

Inadequate regional power grids and weak interconnection systems have left many hydroelectric plants underutilized. Without reliable infrastructure to transmit electricity over long distances, much of the generated power cannot reach areas with high demand.

12. Comment on the contribution of river basins to economic development using the Kilombero river basin as an example.

The Kilombero river basin supports extensive agricultural activities by providing reliable water for irrigation. The fertile floodplains of the basin enable farmers to grow crops such as rice, maize, and sugarcane, contributing significantly to food security and local incomes.

The basin plays a vital role in livestock keeping, offering abundant pasture and water for cattle, goats, and other animals. This sustains pastoral livelihoods and provides products like meat, milk, and hides for local and national markets.

Fisheries in the Kilombero river basin provide both food and employment. Freshwater fish caught from the river support local diets and create business opportunities for traders and fishmongers.

The river basin supports hydropower generation potential, though not yet fully exploited. The presence of consistent water flow makes it possible for small and medium-scale hydroelectric projects to supply rural areas with clean, renewable energy.

Tourism is also enhanced by the natural beauty of the basin's wetlands, forests, and wildlife. Game reserves and eco-tourism sites attract visitors, generating income for communities and supporting conservation efforts.

13. Support by giving five points the statement that "good lesson planning brings effectiveness to the teaching and learning processes."

Good lesson planning ensures that a teacher is well-organized and prepared, knowing exactly what to teach, the objectives to be achieved, and the methods to be used, which creates a smooth and focused learning environment.

It enables teachers to allocate time efficiently for each section of the lesson, ensuring important content is covered without rushing or omitting crucial points, which enhances students' understanding.

Lesson planning guides teachers in selecting appropriate teaching and learning resources in advance, ensuring that materials such as maps, charts, and audiovisual aids are ready and suitable for the lesson.

It helps the teacher anticipate possible classroom challenges or student difficulties and plan suitable strategies to address them, maintaining discipline and effective classroom control.

A well-planned lesson allows for proper assessment of students' understanding through appropriate exercises, discussions, or evaluations, enabling the teacher to measure learning outcomes and make necessary adjustments.

14. Examine five factors that should be considered when one is preparing a place for establishing a weather station.

The site should be open and free from obstructions like tall buildings, trees, or hills that could interfere with the accurate recording of weather elements such as wind speed, direction, temperature, and sunshine.

It should be located on flat, well-drained land to prevent the accumulation of water that might affect the accuracy of instruments like rain gauges and thermometers.

The site should be secure and accessible to ensure that instruments are protected from theft, vandalism, and accidental damage, while allowing regular visits by observers and technicians.

The location should have minimal human activity and pollution, as excessive smoke, heat, or dust from industries and roads can distort readings, especially for air quality, temperature, and humidity.

It should have reliable communication and data transmission facilities if the weather station is to provide timely reports for forecasting and research. This ensures collected data can be sent promptly to relevant agencies and users.