THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL OF TANZANIA

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

713 **GEOGRAPHY**

(SUPPLEMENTARY)

Time: 3 Hours. **ANSWER** **Year: 2008**

Instructions

1. This paper consists of sections A, B and C.

2. Answer **all** questions from Section A and **two (2)** questions from each of section B and C.

3. Section A carries **40** marks, Section B and C carry 30 marks each.

4. Cellular phones are **not** allowed inside the examination room.

5. Write your **Examination Number** on every page of your answer booklet

SECTION A (40 Marks)

Answer all questions in this section.

1. Distinguish four major physiographic belts in the East African landscape and explain how each belt affects land tenure and farm patterns.

   The **highland plateaus** have fertile soils and moderate climate. Farms are permanent and land tenure is often individually owned.

   The **rift valleys** contain volcanic soils and scattered water bodies. Farms are concentrated in valley floors, and land is often divided communally or leased.

   The **coastal plains** are low-lying with sandy soils. Farming is limited to areas with irrigation, and land tenure often includes communal or long-term lease systems.

   The **interior savannahs** are flat grasslands. Land is mainly used for pastoralism, and tenure is commonly communal or tribal.

2. Explain four economic incentives or social norms that contribute to persistent high birth rates within certain Tanzanian communities.

   Children as economic assets provide labor for agriculture.

   Preference for large families ensures support in old age.

   Cultural and religious norms favor early marriage and high fertility.

   Limited access to contraception encourages higher birth rates due to lack of family planning knowledge.

3. List four infrastructural or behavioural factors that increase infant mortality in remote Tanzanian villages, and suggest a mitigation action for each.

   Lack of health facilities delays treatment; mitigation: establish local clinics.

   Poor sanitation leads to infections; mitigation: provide clean water and latrines.

Home births without skilled attendants increase complications; mitigation: train community midwives.

Malnutrition weakens immunity; mitigation: implement supplementary feeding programs.

4. Explain the advantages of using electronic distance-measuring devices in land surveys compared with traditional pacing and chain surveys.

Electronic devices provide **higher accuracy**, **faster data collection**, and **automatic digital recording**, reducing human errors common in pacing or chain methods.

5. Discuss four economic outputs or industries sustained by glacially-formed terrain in northern Europe, and why glaciation favored those industries.

Hydropower generation utilizes glacial valleys with steep gradients.

Tourism benefits from scenic mountainous landscapes.

Agriculture exploits fertile soils deposited by glaciers.

Mining and quarrying exploit glacial moraines rich in sand, gravel, and minerals.

6. Examine two direct economic benefits and two social-environmental costs of expanding hospitality and leisure services in Tanzania.

Economic benefits: foreign exchange earnings and job creation.

Social benefits: infrastructure improvements like roads and communication.

Environmental cost: habitat destruction and pollution.

Social cost: displacement of local communities and cultural disruption.

7. (a) Give a working definition of environmental contamination.

Environmental contamination is the presence of harmful substances in the air, water, or soil that can cause damage to ecosystems and human health.

(b) Present a scheme to classify contamination by effect severity and by source type.

By **effect severity**: minor, moderate, severe. By **source type**: industrial, agricultural, domestic.

(c) Provide an example of industrial contamination and one immediate remedial step.

An example is untreated effluent discharged from a factory; remedial step: install wastewater treatment before release.

8. (a) Define pollution as used in environmental studies.

Pollution is the introduction of contaminants that adversely affect the physical, chemical, or biological quality of the environment.

(b) List four dominant pollution forms affecting coastal towns.

Water pollution, air pollution, noise pollution, and solid waste pollution.

(c) Choose one form and explain two short-term impacts on fisheries.

Water pollution can kill fish due to oxygen depletion and contaminate edible species, reducing market value.

9. Identify four engineering and geographic requirements for a commercially viable hydroelectric facility, and briefly explain each.

Adequate water flow ensures continuous energy generation.

High hydraulic head allows turbines to convert potential energy efficiently.

Stable terrain supports dam and infrastructure construction.

Access to transmission networks ensures electricity distribution with minimal loss.

10. Describe four ways geography teaching prepares students to participate in land-use planning and natural-resource decisions in Tanzania.

Map interpretation skills allow informed decisions about zoning.

Resource assessment knowledge supports sustainable use of water, forests, and soils.

Disaster risk understanding aids planning for floods or landslides.

Community engagement encourages participation in environmental initiatives, such as reforestation or irrigation projects.

SECTION B (40 Marks)

Answer two (2) questions from this section.

11. Discuss four transferable skills students develop while studying geography, and link each skill to a role in public or private sectors.

Critical thinking: supports environmental policy analysis.

Data collection and observation: used in urban planning or GIS work.

Spatial analysis: applicable in transport and logistics.

Report writing and communication: essential for environmental consultancy or research.

12. (a) What do teachers mean by instructional supports in geography?

Instructional supports are resources and tools that enhance teaching and learning, such as maps, charts, globes, GPS units, and interactive software.

(b) Critically assess three strengths and one limitation of using virtual field trips in secondary schools.

Strengths: access to remote locations, cost-effective, enhances visualization.

Limitation: lacks hands-on experience and tactile learning opportunities.

(c) Recommend two teacher-led demonstrations to explain weather systems.

Use a smoke box to show airflow and wind patterns, and a water-heating model to demonstrate convection and rainfall formation.

13. Evaluate four recording methods for geographic investigation—field diary, digital sensor logs, sketch maps, and structured questionnaires—focusing on their classroom suitability.

Field diary: captures observations but is time-consuming.

Digital sensor logs: accurate and automated, but require technology.

Sketch maps: encourage visualization, but accuracy may be low.

Structured questionnaires: collect standardized data, suitable for surveys but may limit qualitative insights.

14. Discuss four benefits a teacher gains from a detailed subject outline, and give one example per benefit.

Planning: ensures topics are covered systematically, e.g., scheduling fieldwork.

Assessment alignment: links objectives with evaluation, e.g., matching map exercises to marks.

Resource allocation: identifies materials needed, e.g., GPS or contour maps.

Continuity: maintains uniform teaching across classes, e.g., consistent coverage of climatic zones.

SECTION C (20 Marks)

Answer two (2) questions from this section.

15. (a) Explain the components of a lesson plan.

Components include objectives, starter activity, main activities, resources, assessment, and closure.

(b) Prepare a 45-minute detailed lesson plan for Form One on “Spin of the Earth and observable consequences,” including an exit assessment.

Objectives: Understand rotation effects on day-night cycle.

Starter (5 min): Ask students about sunrise and sunset times.

Main activities (30 min): Globe demonstration (10 min), discussion of Coriolis effect and local wind patterns (10 min), worksheet on day-night zones (10 min).

Assessment (10 min): Students answer oral questions on rotation and time zones.

16. Identify four classroom strategies to develop observational and measurement skills for geography practicals, and give a sample activity for each.

Demonstration: Show how to use a clinometer to measure slope; students practice in schoolyard.

Guided practice: Students measure transect distances with tape; record in tables.

Peer teaching: Students instruct each other on GPS use to locate points.

Problem-solving exercises: Students calculate area from field measurements and identify errors.

17. Produce a lesson plan that uses Think-Pair-Share for teaching map scale conversion, list expected student outputs and timing.

Think (5 min): Students individually solve scale conversion problems.

Pair (10 min): Compare calculations and discuss solutions.

Share (10 min): Present results to class; teacher checks for accuracy.

Outputs: Correct conversion tables and problem solutions.

18. Discuss four roles of assessment in improving geography instruction, and for each recommend a practical classroom tool.

Monitoring understanding: use short quizzes.

Skill evaluation: observation checklist during fieldwork.

Instructional feedback: student reflection forms.

Curriculum alignment: review portfolios or cumulative grade sheets.