THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATION COUNCIL OF TANZANIA

DIPLOMA IN SECONDARY EDUCATION EXAMINATION

713 **GEOGRAPHY**

(SUPPLEMENTARY)

Time: 3 Hours. **ANSWER** **Year: 2014**

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. **Identify four landscape zones in the eastern highlands and note one farming activity typical in each.**

   Rift valley floor: Flat and fertile soils make it ideal for irrigated crops such as rice and vegetables.

   Highland plateaus: Moderate slopes allow cultivation of maize, wheat, and tea plantations.

   Mountain slopes: Steeper areas support terrace farming of coffee and horticultural crops to prevent soil erosion.

   Escarpments and cliffs: Limited farming occurs in pockets where soil accumulates, often for small-scale grazing or fruit trees.

2. **Mention four economic or cultural incentives that encourage larger household sizes.**

   Labor contribution: More children help with farm work, herding, and domestic chores.

   Social prestige: In some communities, having many children enhances a family's status and influence.

   Security for old age: Parents expect children to provide care and support in later years.

   Religious or cultural beliefs: Certain beliefs encourage high fertility and discourage contraception.

3. **State four supply- or service-related factors that can increase newborn mortality.**

   Limited access to skilled birth attendants: Untrained deliveries increase complications and deaths.

   Poor vaccination coverage: Infants remain susceptible to preventable diseases such as measles.

   Insufficient emergency care: Delays in treating birth complications can be fatal.

   Inadequate sanitation: Contaminated water and poor hygiene lead to infections in newborns.

4. **Define the use of an electronic distance meter in fieldwork.**

An electronic distance meter (EDM) measures distances precisely using electromagnetic waves, improving speed and accuracy over traditional chain-and-compass surveys.

5. **List four industries that benefit from ice-carved valleys in Europe and give one short reason for each.**

Tourism: Scenic landscapes attract visitors for skiing and hiking.

Hydropower: Valleys guide rivers, enabling dam construction and energy generation.

Agriculture: Fertile soils from glacial deposits support crop cultivation.

Mining: Glacial activity exposes mineral deposits such as sand, gravel, and ores.

6. **Give two benefits and two drawbacks of visitor growth near game reserves.**

Benefits: Tourism generates revenue for communities and improves local infrastructure like roads and lodges.

Drawbacks: Wildlife disturbance and habitat destruction can occur, and local cultures may be disrupted by tourist behavior.

7. (a) **What is ecosystem contamination?**

Ecosystem contamination occurs when pollutants enter the environment, harming plants, animals, and humans.

(b) **Give two examples by medium.**

Water contamination: Pollutants entering rivers and lakes.
Air contamination: Smoke, dust, and chemical fumes in the atmosphere.

8. (a) **Define pollutant in one line.**

A pollutant is any substance introduced into the environment that causes harm to living organisms or ecosystems.

(b) **Give two sources of coastal contamination.**

Industrial discharge: Factories release untreated waste into rivers reaching the sea.
Marine litter: Plastics and debris from ships and coastal towns accumulate on beaches and in water.

9. **State four site requirements for a successful run-of-river energy project.**

Reliable river flow: Ensures consistent electricity generation.
Sufficient gradient: Provides energy potential for turbines.
Stable geology: Supports construction of infrastructure like intake channels and turbines.
Accessibility: Roads are needed for maintenance and transmission line installation.

10. **Give four short points on how geographical knowledge helps local planners.**

Land-use decisions: Understanding topography guides zoning and settlement planning.
Disaster preparedness: Knowledge of flood-prone zones helps reduce risk.
Resource management: Identifies locations for irrigation, forests, and minerals.
Transport planning: Helps design efficient road and rail networks across varied terrain.

SECTION B (40 Marks)

Answer two (2) questions from this section.

11. **Discuss four transferable skills learners develop from map work and field observation.**

Spatial analysis: Students interpret patterns on maps to make decisions about land and resources.

Problem-solving: Fieldwork challenges develop analytical thinking and practical solutions.

Communication: Presenting field observations improves reporting and explanation skills.

Collaboration: Working in groups during field activities teaches teamwork and coordination.

12. (a) **Define resource aids for lessons.**

Resource aids are materials or tools, such as maps, charts, globes, and models, that assist teachers in conveying geographical concepts effectively.

(b) **Evaluate two strengths and one weakness of using field sketches with students.**

Strengths:

Encourage active observation and understanding of spatial relationships.

Foster creativity and reinforce memory through drawing.

Weakness:

Sketches can be inaccurate if students lack proper training or guidance.

13. **Compare and critique three common methods of capturing spatial data in student projects.**

GPS devices: Highly accurate and fast for collecting coordinates, but expensive and requires technical skill.

Sketch maps: Flexible and quick, but often less precise and subjective.

Photographs: Capture features clearly for later reference, but require interpretation and may not include scale.

14. **Explain how a clear syllabus supports consistent teaching and fair testing.**

Sequencing topics: Ensures teachers cover all required areas in logical order.
Assessment alignment: Helps match exercises and exams to learning objectives.
Time allocation: Guides how much time to spend per topic to cover the syllabus completely.
Resource planning: Identifies maps, charts, and field aids needed for each lesson.

SECTION C (20 Marks)

Answer two (2) questions from this section.

15. (a) **What belongs in a lesson template?**

Objectives, learning activities, teaching aids, assessment methods, and time allocation are core components.

(b) **Draft a 45-minute lesson for beginners on "Rotation of the planet", including assessment question(s).**

Objectives: Understand Earth's rotation and its effects on day and night.
Activities: Demonstrate rotation using a globe and flashlight; students predict day and night in different regions.
Assessment: Ask students to describe why the Sun appears to rise in the east and set in the west.

16. **Give four classroom activities that build students' skills in taking measurements outdoors.**

Using measuring tapes: Students measure distances between points along a transect.

Clinometer use: Learners determine slope angles of hills or valleys.

Pacing: Count steps to estimate distances when tools are unavailable.

Field sketches: Draw observed features with annotations to record measurements visually.

17. **Create a short Think-Pair-Share lesson for teaching scale conversion, include expected student outputs.**

Think (5 min): Students calculate real-world distances from a given map scale.

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

Share (10 min): Present findings to the class; teacher clarifies misconceptions.

Expected output: Correct conversion of map distances into real-world distances with clear explanation.

18. **Describe four classroom checks a teacher can use to measure student progress in geography.**

Oral questioning: Ask targeted questions to gauge understanding.

Short quizzes: Test knowledge of map reading or physical features.

Practical tasks: Observe students performing field measurements or plotting data.

Peer assessment: Students review each other's sketches or calculations to reinforce learning and identify errors.