INSTRUCTIONS

1. This paper consists of section A, B, C and D

2. Answer all questions in section A, B and C and one (1) question from each part of section D

3. Map extract of Kigoma (Series Y 742 sheet 92/3) is provided

4. Calculators and cellular phones are not allowed in the examination room

5. Write your examination Number one every page of your answer booklet(s)

This paper consists of 4 printed pages
SECTION A: (25 Marks)
Answer all questions in this section
PHYSICAL AND MATHEMATIC GEOGRAPHY

1. For each of the items (i - x) choose the correct answer from among the given alternatives and write its letter beside the item number

(i) Which of the following instrument is to measure wind speed
   (a) Wet and dry bulb thermometer       (b) Hygrometer
   (c) Rain gauge                          (d) Anemometer
   (e) Wind vane

(ii) Reverse fault is mainly caused by:
     (a) Earth movement
     (b) Tensational force
     (c) An earth quakes
     (d) Weathering
     (e) Compressional force

(iii) The temperature of Tanga which is located at sea level is 34°C. What will be the temperature of Mandara Hut located at 4800 metres above sea level on Mount Kilimanjaro?
     (a) -5.2°C     (b) 25.8°C     (c) 15.2°C     (d) 5.2°C     (e) 10.8°C

(iv) Fertile heap of fine sand in semi desert and hot areas
     (a) Drass       (b) Seifs      (c) Sand dunnes (d) Alluvium  (e) Loess

(v) Which among the following feature occurs in a glaciated lowland region?
    (a) Esker       (b) Cirque     (c) Pyramidal peak (d) Hanging valley (e) Arête

(vi) Town Z is six hours behind town T which is at 30°C. What will be the Meridian of town Z?
     (a) 30°C E     (b) 90°C E     (c) 30°C W
     (d) Greenwich meridian (e) 60°C W

(vii) The magnitude of an earthquake refers to the
      (a) Effects produced by the earthquake
      (b) Large amplitude waves known as L-wave
      (c) Point at which earthquake originates
      (d) Total amount of energy released
      (e) Point on the earth's surface above the focus

(viii) Soil erosion can be prevented through
       (a) Bush fire          (b) Shifting cultivation
       (c) Zero grazing       (d) Cutting trees
       (e) Overgrazing

(ix) All are related to weathering except
     (a) Overgrazing animals
     (b) Rapid temperature change
     (c) Penetration of tree roots into rocks
     (d) Rain water and sea water spray action
     (e) Bees making nets in the tree roots
Which one of the following by origin and composition is not a form of igneous rocks?
(a) Dyke
(b) Granite
(c) Coal
(d) Lava plain
(e) Volcano

Math the items in list “A” with the responses in list “B” by writing the letter of the correct response beside the item number

<table>
<thead>
<tr>
<th>LIST A</th>
<th>LIST B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) The large mass of magma (granite) which forms the root or core of a mountain</td>
<td>A. Lopolith</td>
</tr>
<tr>
<td>(ii) The earth’s Zone which is made up of nickel and Iron</td>
<td>B. Crater</td>
</tr>
<tr>
<td>(iii) Formed when lava cools and solidify on the earth surface to form extrusive features.</td>
<td>C. Phacolith</td>
</tr>
<tr>
<td>(iv) Funnel- shaped volcanic depression which forms at the mouth of volcanic vent</td>
<td>D. Dyke</td>
</tr>
<tr>
<td>(v) Very large source – shaped mass of igneous intrusion</td>
<td>E. Core</td>
</tr>
</tbody>
</table>

Explain the types of mass wasting and their features

SECTION B: (27 Marks)
APPLICATION OF STATISTICS, RESEARCH SURVEY AND LEVELLING

Read carefully the data for station X forest plantations in Tanzania (2007) and then answer the questions that follow

<table>
<thead>
<tr>
<th>Project area</th>
<th>Soft wood (ha)</th>
<th>Hard wood (ha)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liwale</td>
<td>1570</td>
<td>172</td>
<td>1742</td>
</tr>
<tr>
<td>Meru</td>
<td>5136</td>
<td>670</td>
<td>(a)</td>
</tr>
<tr>
<td>Nang’umbu</td>
<td>(b) 128</td>
<td></td>
<td>5219</td>
</tr>
<tr>
<td>Dodoma</td>
<td>4316</td>
<td>(c)</td>
<td>4562</td>
</tr>
<tr>
<td>TOTAL</td>
<td>(d)</td>
<td>1216</td>
<td></td>
</tr>
</tbody>
</table>

(i) Calculate the values for (a) - (e) in the table above
(ii) Present the data by comparative bar graph

5. (a) Show the difference between Null hypothesis and Alternative hypothesis
(b) Using Alternative hypothesis write three hypothesis for the decline in form four 2010 examination performance

6. (a) What do you understand by the following
(i) Levelling
(ii) Intermediate sight
(b) Describe sources of instrumental errors in chain survey (3 points)
SECTION C (28 MARKS)
MAP READING AND PHOTOGRAPH INTERPRETATION

7. Study the Printed map extract of Kigoma (series Y 742 SHEET 92/3) then answer the questions that follows.
   (a) Measure the distance in km of all weather road from grid reference 950648 up to 020635
   (b) Identify the settlement pattern of the area
   (c) Outline the method used to show the scale of a given map
   (d) With vivid evidence from the map identify three (3) major economic activities taking place in the area
   (e) What is the bearing and direction of Gungu (940623) from Kagera 3 (000568)

8. (a) What is photograph interpretation
     (b) Give five importance of photographs in studying geography.
     (c) Outline three (3) Differences between maps and photographs

SECTION D: (20 Marks)
PART I
REGIONAL FOCAL STUDIES
Answer one question from each part

9. Which factors have been triggered off the success of commercial beef keeping in central Tanzania? Any eight (8) factors

10. “Plantation agriculture is very potential for the growth of economy of developing countries”. Justify this statement by providing 6 points

PART II
ENVIRONMENTAL ISSUES, POPULATION AND SETTLEMENT

11. Briefly explain the main causes of pollution in the Third world countries any six (6) point

12. Explain factors which encourage rapid population growth in East Africa especially in Kenya, Uganda and Tanzania (any seven (7) points)
THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

013

GEOGRAPHY
(For School Candidates Only)

Time: 3 Hours ................................ Tuesday, 4th October 2011 a.m.

Instructions

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

2. Answer all questions in sections A, B and C and one (1) question from each part of section D.

3. Map extract of Malampaka (sheet 49/1) is provided.

4. Credit will be given for the use of relevant sketch maps and diagrams.

5. Calculators and cellular phones are not allowed in the examination room.

6. Write your Examination Number on every page of your answer booklet(s).

This paper consists of 6 printed pages.
SECTION A (25 Marks)

Answer all questions in this section.

PHYSICAL AND MATHEMATICAL GEOGRAPHY

1. For each of the items (i) – (x) choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) One of the following features is a characteristic of coniferous forests:
A. Trees are made up of hard wood  B. Trees occur in stands
C. Trees favour high temperatures  D. Trees have broad leaves
E. Trees grow in a few years.

(ii) The Inter-Tropical Convergence Zone (ITCZ) means
A. a region of low pressure  B. a region of doldrums
C. a region of high pressure  D. a sub-tropical high pressure belt
E. a region with high speed winds.

(iii) Rias often provide natural harbour because they are
A. found along the sub-merged coast.
B. mainly found in Europe where the sea is shallow.
C. deep outlets of water along the coast.
D. not deep, ships can approach the ports easily.
E. similar to lagoons but have shallow depths.

(iv) If the local time at town X (30°E 45°N) is 5.00 p.m. Monday, what will the time be at town Y (15°W 50°S)?
A. 2 a.m. Monday  B. 8 p.m. Monday
C. 2 p.m. Monday  D. 3 p.m. Monday
E. 2 p.m. Sunday.

(v) The following are instruments used in chain and tape survey:
A. Barometer, pegs, notebook, compass
B. Tape measure, chain, cross staff, anemometer
C. Chain, arrows, ranging poles, altimeter
D. Arrows, ranging poles, pegs, chain
E. Cross staff, notebook, chain and plane table.

(vi) When the river flows in its long profile it performs the following geological activities:
A. Moves fast and can carry everything on the earth’s surface
B. Erodes, transports and deposits weathered materials
C. Meanders and forms ox-bow lakes throughout the profile
D. Does three functions such as abrasion, solution and attrition
E. Acts as agent of weathering and erosion along the profile.
(vii) If the location of a point on a map is given by grid reference 365490, then
A 365 are Degrees   B 365 are Longitudes
C 490 are Northings  D 490 are Eastings
E 365 are Northings.

(viii) The following are the elements of weather:
A Soils, clouds, dew, humidity, rainfall
B Fog, barometer, humidity, pressure, air mass
C Clouds, sunshine, pressure, humidity, thermometer
D Pressure, clouds, sunshine, humidity, winds
E Pressure, humidity, soils, fog.

(ix) Which one of the following is not an outcome of the rotation of the earth on its own axis?
A Deflection of winds and ocean currents
B Difference of one hour between two meridians 15° apart
C Day and night
D Seasons of the year
E Sunrise and sunset.

(x) Landforms formed by vulcanicity can be divided into
A Many parts according to the nature of lava
B Sills, dykes, valleys and earthquakes only
C Volcanic mountains and sills only
D Extrusive and intrusive features
E Batholiths, dykes and volcano only.

2. Match the items in List A with the responses in List B by writing the letter of the correct response besides the item number.

<table>
<thead>
<tr>
<th>List A</th>
<th>List B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Earth’s zone which is rich in Nickel and iron.</td>
<td>A    Soil texture</td>
</tr>
<tr>
<td>(ii) Erosional feature which is always formed in the young/upper stage of the river valley.</td>
<td>B    Delta</td>
</tr>
<tr>
<td>(iii) Consists of a huge canopy which limits the undergrowth.</td>
<td>C    Soil structure</td>
</tr>
<tr>
<td>(iv) The feel of coarseness or softness of the individual soil particles.</td>
<td>D    Mantle</td>
</tr>
<tr>
<td>(v) A planet in the solar system with the longest orbit around the sun.</td>
<td>E    Jupiter</td>
</tr>
<tr>
<td></td>
<td>F    Coniferous forest</td>
</tr>
<tr>
<td></td>
<td>G    Core</td>
</tr>
<tr>
<td></td>
<td>H    Pluto</td>
</tr>
<tr>
<td></td>
<td>I    Tropical rainforest</td>
</tr>
<tr>
<td></td>
<td>J    Interlocking spurs</td>
</tr>
</tbody>
</table>
3. Soils may differ from one area to another but they share almost the same components. Describe the composition of soil.

SECTION B (27 Marks)

Answer all questions in this section.

APPLICATION OF STATISTICS, INTRODUCTION TO RESEARCH AND ELEMENTARY SURVEYING

4. Data in the following table show the enrolment of Form One students at Mji Mpya Secondary School from 2006 to 2010. Carefully study them and answer the questions that follow.

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>220</td>
<td>200</td>
<td>150</td>
<td>180</td>
<td>205</td>
</tr>
</tbody>
</table>

(a) Present the data by using simple bar graph.
(b) Comment on the trend of the enrolment.
(c) Explain the advantages of the method you have used in (a) above.

5. (a) What is hypothesis formulation?

(b) Explain four importance of hypothesis in research.

6. Form three students at Nguvumali secondary school would like to conduct a simple chain survey around their school compound and measure the height of a big gully near the headmaster’s office. Describe the significance of survey in Tanzania.

SECTION C (28 Marks)

Answer all questions in this section.

MAP READING AND PHOTOGRAPH INTERPRETATION

7. Carefully study the map extract of Malampaka (sheet 49/1) provided and answer the following questions:

(a) Calculate the area covered by seasonal swamps in Km².
(b) Explain the distribution of natural vegetation.
(c) How long in kilometres is river Ng’hulu from grid reference 625496 to grid reference 700522?
(d) Identify any three ways which have been used to represent relief in the area.

(e) Through giving evidence, explain any four economic activities that might be taking place in the area.

8. Carefully study the following photograph and answer the questions that follow.

(a) Suggest the type of the photograph by giving two reasons.

(b) Suggest any four economic activities that might be taking place in the area shown on the photograph.

(c) Comment on the nature of the settlement pattern as it is portrayed on the photograph.
(d) Explain the relief of the area.

SECTION D (20 Marks)

Answer one (1) question from each part.

PART 1: REGIONAL FOCAL STUDIES

9. (a) Distinguish between large scale and small scale farming.

(b) What are the advantages of large scale over small scale farming?

10. "Oil as an economic resource has improved the living standards of the people of Libya". Discuss.

PART II: ENVIRONMENTAL ISSUES, POPULATION AND SETTLEMENT

11. Explain the environmental factors which influence population distribution in Tanzania.

12. Suggest the measures to be taken in order to reduce the effects of global climate change at national level.
THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

013

GEOGRAPHY
(For Both School and Private Candidates)

Time: 3 Hours Thursday, 05th November 2015 a.m.

Instructions

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

2. Answer all questions in sections A, B and C and one (1) question from each part of section D.

3. Map extract of Kasamwa (Sheet 32/4) is provided.

4. Credit will be given for the use of relevant diagrams.

5. Calculators and Cellular phones are not allowed in the examination room.

6. Write your Examination Number on every page of your answer booklet(s).
SECTION A (25 Marks)

Answer all questions in this section.

PHYSICAL AND MATHEMATICAL GEOGRAPHY

1. For each of the items (i) – (x), choose the correct answer from among the given alternatives and write its letter in the answer booklet provided.

(i) Autumn, winter, spring and summer are the result of
   A monsoon  B lunar eclipse  C rotation
   D revolution  E tides.

(ii) A large part of the Southern Hemisphere is covered by
   A land mass  B volcanoes  C water mass
   D dark clouds  E ice.

(iii) The shallow part of the sea that stretches out from the coast is called
   A Continental shelf  B Continental slope  C Ocean ridge
   D Ocean trench  E Island.

(iv) Which of the following is not a factor influencing temperature of a place?
   D Eclipse.  E Length of a day.

(v) The sideways erosion which widens the V-shaped valley is known as
   A vertical erosion  B lateral erosion  C headward erosion
   D hydraulic action  E attrition.

(vi) Deposition of soil materials removed from one horizon to another is called
   A illuviation  B weathering  C eluviation
   D organic sorting  E leaching.

(vii) Which of the following results to vertical movements within the earth’s crust?
   A Earthquake, faulting and volcanic eruptions.
   B Block mountains, raised beaches and broad basins.
   C Volcanic eruptions, rock fall and asymmetric folds.
   D Fold mountains, basins and asymmetrical folds.
   E Emerged coasts, over folds and faulting.

(viii) Which among the following features is the impact of water action in the desert?
   A Yardang  B Gullies  C Badlands
   D Sinkholes  E Rock pedestals.

(ix) An active state of decomposition caused by soil microorganism is called
   A organic matter  B soil water  C mineral matter
   D soil air  E soil components.
Which of the following is associated with magnitude of an earthquake?

A  Richter scale  B  Seismography  C  Focus
D  Epicenter  E  Tsunami.

2. Match the items in List A with responses in List B by writing the letter of the correct response beside the item number in the answer booklet provided.

<table>
<thead>
<tr>
<th>List A</th>
<th>List B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Residues that have decomposed and mixed with soil mass.</td>
<td>A  Soil type</td>
</tr>
<tr>
<td>(ii) Status of soil with respect to amount of elements necessary for plants growth.</td>
<td>B  Soil profile</td>
</tr>
<tr>
<td>(iii) Removal of materials from surface of land.</td>
<td>C  Loam soil</td>
</tr>
<tr>
<td>(iv) Vertical section of the soil to the underlying rocks.</td>
<td>D  Soil texture</td>
</tr>
<tr>
<td>(v) Fineness and coarseness of soil particles.</td>
<td>E  Soil structure</td>
</tr>
<tr>
<td></td>
<td>F  Soil fertility</td>
</tr>
<tr>
<td></td>
<td>G  Soil organic matters</td>
</tr>
<tr>
<td></td>
<td>H  Soil chemistry</td>
</tr>
<tr>
<td></td>
<td>I  Soil erosion</td>
</tr>
<tr>
<td></td>
<td>J  Soil water</td>
</tr>
<tr>
<td></td>
<td>K  Soil air</td>
</tr>
</tbody>
</table>

3. With the aid of a well labeled diagram, describe the internal structure of the earth.

SECTION B (27 Marks)

Answer all questions in this section.

APPLICATION OF STATISTICS: INTRODUCTION TO RESEARCH AND ELEMENTARY SURVEYING

4. Study the following data showing the production of Irish Potatoes in a thousand (“000”) tones in three villages in Tanzania from 2000 to 2002, then answer the questions that follow:

<table>
<thead>
<tr>
<th>Year</th>
<th>Potato production (“000”)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sunga</td>
</tr>
<tr>
<td>2000</td>
<td>20</td>
</tr>
<tr>
<td>2001</td>
<td>40</td>
</tr>
<tr>
<td>2002</td>
<td>50</td>
</tr>
</tbody>
</table>

(a) Construct a compound bar graph to show the production of Irish potatoes in the three villages.

(b) Give three advantages and two disadvantages of the compound bar graph.

(c) Suggest any other three methods which could be used to present the data provided in the table.
5. (a) What is an interview?
   (b) Analyze five things to be adhered to for a researcher to have a successful interview.

6. (a) (i) Define chain survey.
       (ii) Give four principles of chain survey.
   (b) Give one reason for each of the following:
       (i) Ranging pole has a pointed metal end.
       (ii) Note book is important during field study.
       (iii) Back bearings are taken during compass survey.
       (iv) During surveying, measurements are called back by the booker.

SECTION C (28 Marks)

Answer all questions in this section.

MAP READING AND PHOTOGRAPH INTERPRETATION

7. Study the map extract of Kasamwa (Sheet 32/4), then answer the questions that follow:
   (a) Identify two ways that have been used to show relief on the map.
   (b) Draw a relief section to connect Nyabubele Hill at 383834 and Bungwe Hill at 430825.
   (c) Identify the length of the all-weather road in km from grid reference 315844 to 443940.
   (d) Find the bearing of Chabulongo Hill at 367917 to a school at Nyamahuna 349818.
8. Carefully study the photograph below then answer the questions that follow:

(a) Name the type of photograph.
(b) Describe the relief of the area.
(c) Giving two reasons, describe the scale of production of the crop in the photograph.
(d) Explain two uses of the crop in the photograph.
(e) Describe three conditions necessary for the production of the crop.

SECTION D (20 Marks)

Answer one (1) question from each part.

PART 1: REGIONAL FOCAL STUDIES


10. Analyse six potentials of the Rufiji river basin.
PART II: ENVIRONMENTAL ISSUES, POPULATION AND SETTLEMENTS

11. Give five reasons for decreasing death rates in many parts of the world.

12. With the aid of examples, describe six factors affecting growth of settlements in Africa.