4.

1. MAP QUESTION
   a) Data given
      Map distance 18cm   **1mark**

      Map scale   1; 50000
      2cm = 1km
      18cm =?   **1 mark**
      =9km
   The distance of the road is 9km   **2 marks**

   b) The type of climate of a mapped area is Modified Equatorial Climate   **1 mark**
      Evidences 2 **points. each point 1 mark**
        i.   Latitudinal location
        ii.   Vegetation cover
        iii. Water bodies
        iv.   Relief

   c) Methods of representing relief features apart from contour method are
        i.   Trigonometric station. this is found at grid reference 645277
        ii.   Hachuring method. This is found at grid reference 680160 it is used to show the slope
      Two points each one marks = 2 marks

   d) The bearing of Gusa mission to Mesaba hill is 120^0 **3marks**
      From the formula
      BB=FB±180
      BB=300^0 **2 Marks**

   e) The area once experienced volcanic eruption due to the following evidences
        i.   Presence of crater
        ii.   Presence of hills
        iii. Presence of forest
        iv.   Water bodies.

      3 points each 1 marks= 3 marks

4.

    f) The following are economic activities from a mapped area
- i. Tourism activities
- ii. Mining activities
- iii. Lumbering activities
- iv. Pastoralism activities
- **v.** Trading activities   **5 points each 1 mark if evidence is provided =5 marks**

    g) The following are obstacles for the smooth establishment of settlements west part of a napped area
- i. Presences of mountains and hills
- ii. Presence of BALANGIDA
- iii. Presence of steep slopes
- iv. Presence of harsh vegetation cover,
  3 points= 3 marks

TOTAL =25 MARKS.

4.

2. A. The following are types of obstacles a surveyor can meet during chain survey.
   i.   Obstacles to chaining
   ii.   Obstacles to ranging
   iii. Obstacles to both ranging and chaining
       2MARKS FOR EACH =6 MARKS
   B.Diagram
   5 MARKS

   C. Applications or usefulness of chain survey in our daily life
   i.   It is used in measuring of distances on the ground
   ii.   It is applied in division of plots
   iii. It is used in construction activities
   iv.   It used in solving land conflicts
       4 points each 1 mark=4 marks.

       Total marks= marks

3. **A. INCREASE OF STREET CHILDREN IN SOCIETIES**   **1mark**
   B. The two types of hypothesis
   i.   Null hypothesis
         The increase of street children in the societies is due to family poverty
   ii.   Alternative hypothesis
         The increase of street children in the societies is not due to family poverty.

       2 points each 2marks =4 marks
   C. The sources of the stated research problem are
       I.   From the societies
       II.   From NGOS
       III. From personal experience
       IV.   From readings
             3 points each 2 marks=6 marks

   D. The following are the significances of the research undertaken by the students
       ● It will help to solve the problem of street children
       ● It will give insight on the causes of street children
       ● It gives knowledge on the causes of street children
       ● It helps to formulate and improve policies on street children,
             4 points each 1 mark   =4 marks

                 Total marks =15 marks

4.

4. Introduction.
A student has to define plate tectonics theory. **1.5 marks**
Main body.
A student has to explain the importance of plate tectonics theory
  a. The theory helps to know the distribution of the earth quake, volcanoes and mountain ranges
  b. It helps to know how continents were formed
  c. It gives insight of rock cycle
  d. It helps to predict the future trend of geomorphic states
  e. It helps to know the dynamic nature of the earths lithosphere
  f. It helps us to take precaution on the future crystal deformation
  g. It helps to know well the existence and the formation of island arcs and oceanic trenches.

7 points each 2.5 marks =17.5 marks.
Conclusion 1 mark
Total 20 marks

5. Introduction
   Meaning of crop production and soil infertile **2marks**

   Main body
   causes of soil infertile 4 points each 2 marks=8 marks
     I.   Soil erosion
     II.   Leaching process
     III. Monoculture
     IV.   Mass wasting
     V.   Soil pollution
     VI.   Deforestation
     VII. Draught

   Ways to improve soil production. 4 points each 2 marks =8 marks
     I.   Crop rotation
     II.   Intercropping
     III. Application of organic manure
     IV.   Cover crops
     V.   Contour farming
     VI.   Mulching
     VII. Bush following

 Conclusion 2 marks.
Total 20 marks

4.

6. Introduction . meaning of coastal zone.   1mark
Main body
Challenges facing coastal areas.

  I. Water pollution
  II. Land degradation
  III. Floods
  IV. Deforestation
  V. Loss of biodiversity
  VI. Increase of population
  VII. Diseases

   6 points each 3 marks=6 marks

Conclusion 1 marks
Total 20 marks

7. Introduction.
Meaning of temperature inversion   **1marks**
Main body
Causes of temperature inversion

  ❖ Presence of ozone layer in the atmosphere

  ❖ Terrestrial radiation

  ❖ Formation of fronts

  ❖ Air subsidence

  ❖ Advection

  ❖ Water vapors

  ❖ Land breeze
   Conclusion 1

6 points each 3 marks =18
Total 20 marks