

WALI UL ASR EDUCATION CENTER
GEOGRAPHY COMPETENCE QUESTIONS

2023

1. Use the map extract of Mkomazi to answer the following questions.
 - a) Find the bearing and direction of Kwamiali grid reference **923803** from Mkomazi grid reference **980868**
 - b) With reasons explain three economic activities that seem to be taking place on the given map.
 - c) Express the scale of the map as statement scale in meters.
 - d) State the (2) types of transport observed from the map
 - e) Calculate the area covered by the seasonal swamps.
2. Carefully study the following information in the table below that shows the number of students at Luco Secondary School and then answer the questions that follows:

| FORM I | FORM II | FORM III | FORM IV |
|---------------|----------------|-----------------|----------------|
| 60 | 125 | 90 | 35 |

- a) Present the number of students in each class in percentage
 - b) Draw a pie graph and represent the data provided
 - c) Define pie graph and outline the advantages of using it
3. Mr. McMillan is a chemist; he is interested to conduct a research about beverage to see the best drinks for human consumption. His plan is to consult consumers who were directly involved in the consumption and visit other scholar's written documents for more information
 - a) What will be the best research approach for his study
 - b) Name the main sources of data for his study
 - c) Suggest the question of his research
 - d) Mention other six possible sources of research problem for the similar study
4. Study the printed map extract of Songwe River (sheet 244/3), then answer the following questions:
 - a) Calculate the area covered by forest in km² by using grid square method.
 - b) Measure the length of railway line form grid references 040118 to 130122
 - c) Describe the nature of the relief of the area.

- d) Name four physical features found on the map.
 - e) Giving evidences from the map, suggest three social activities taking place in the area.
 - f) Comment on the population distribution on the mapped area
 - g) With evidence from the map given identify two methods used to show relief features.
5. Juma and Bahati selling crops in a market, they always record data of their retailing in a note book; their friend Kosi is working in a super market as a store keeper and she told them about the comparative way of presenting data for more than one commodities against time.
6. Kosi showed her friends the following table showing data of commodities received in ‘000’ tones from 2000 – 2003.

| Crops/Year | 2000 | 2001 | 2002 | 2003 |
|------------|------|------|------|------|
| Cassava | 65 | 35 | 60 | 70 |
| Mangoes | 25 | 30 | 20 | 25 |
| Potatoes | 50 | 60 | 45 | 45 |

- a) Present the data by using a grouped line graph.
 - b) Outline five (5) merits of using comparative line graph.
 - c) Suggest any other three (3) method which could be used to present the data provided in the table.
7. Wanjiru is a good cartographer; she intended to produce a contoured map of Simiyu.
- a) What type of survey method would you advise her to apply?
 - b) Apart from producing contour map what is the other significant of the type of survey you have mentioned in (a) above?
8. Hypothesis formulation can be used in both qualitative and quantitative research. Examine the problems faced in hypothesis formulation.
9. Halima observed a natural flow of water in a specified channel. The water flowed in a meandering way because the channel had developed meanders. After some years Halima observed a crescent shaped feature had been formed besides the channel.
- i. Name the crescent shaped feature geographically.
 - ii. Use relevant diagrams to explain the stages of the formation of the feature named in (i) above
 - iii. Mention five (5) importance of the natural flow of water in a specified channel to human life.

10. Study carefully the map extract of KIGOMA Sheet 92/3 and answer the following questions.
- Comment the settlement pattern of the mapped area
 - Show any two methods which have been used to determine the elevation of the mapped area.
 - Find the area of the Lake Tanganyika from latitude 60 northward of the mapped area
 - Examine any four land use of Kigoma area
 - Describe any two major supportive contents of the mapped area
11. Katamba was inside the house where he observed a house shaking due to the vibration of the earth's surface caused by natural forces operating beneath the Earth's crust. Answer the following questions to complete the descriptions.
- What environmental hazard experienced by Katamba?
 - What is the instrument used to measure the intensity of the hazard named in (a) above?
 - Describe briefly the four causes of the hazard in (a) above
 - Describe the four effects of the Hazard named in (a) above
12. Study carefully the data provided for the production of sisal in Kigoma and then answer the following questions.

| YEARS | 2003 | 2004 | 2004 | 2005 | 2006 |
|-------------------------|------|------|------|------|------|
| PRODUCTION (000 TONNES) | 70 | 160 | 120 | 210 | 185 |

- Write any four procedures which might be used to draw the graph above
 - Present the data above by deviation line graph
 - Write down any two other methods which can be used
13. Suppose you want to conduct a geographical research on waste management in your society and your interest is to know waste management practices by residents, design a questionnaire which will enable you to get relevant information or data for your research or study.
14. Lovedock produced a photograph of African continent by satellite vertically from the aircraft. After the production of the picture he provided to his students in geography examination with the following questions. Imagine you were the one, answer those questions.
- What type of the photograph is that?
 - What are the three characteristics of the photograph in (a) above?
 - Comment on the scale of the photograph given in (a) above
 - What are the importance of that photography over other type of the photograph (3 points)

e) Give any three similarities between the photograph named (a) and the map

15. Study carefully the map extract provided of KASAMWA series 32/4 and answer the questions that follows;

- i. The cartographer of KASAMWA map, ensured the basic skills needed by a map reader in the reading and interpretation. Identify three (3) of them the cartographer used.
- ii. A lorry with heavy weight travelled from point of grid reference 320847 to NYALUHWI SWAMP grid reference 440934 and back to the original point measure the distance in kilometer
- iii. Kasamwa town is largely affected by influx of high number of people from the remote areas. Give three (3) negative impacts of the influx.
- iv. Describe three (3) ways used to portray relief in the mapped area
- v. Find the surveyed area of KASAMWA map covering grid reference 345830 and 345930 to 395930 and 395830.

16. The Museveni Girls' secondary school located at Chato - Geita prepared questions in advance in which the same questions were asked to the students who attended the school with a need of securing a chance in the academic year 2022 for form one.

- i. Identify the type of interview used.
- ii. Give four (4) procedures the school used in preparing the questions to be asked.
- iii. Outline three (3) merits and three (3) demerits of the interview method.

17. Study carefully the hypothetical data provided below showing the production of crops in '000' tons in Mbinga district.

| YEAR | MAIZE | BEANS | COFFEE |
|------|-------|-------|--------|
| 2020 | 75 | 45 | 65 |
| 2021 | 80 | 55 | 65 |
| 2022 | 85 | 65 | 70 |

- i. Draw a multiple bar graph to represent the above data.
- ii. A part from multiple line graph, suggest two alternative ways of presenting the same data
- iii. Comment on the graph drawn.

- iv. Give three (3) strength and two (2) setbacks of the method used in 5(i) above
18. Onyango is a land surveyor at Namtumbo district was assigned the task of taking measurement on land which was estimated to be over sixty hectares.
He took his team and carried the measurements whereby they encountered an obstacle which prevented visibility and took them much time to walk around it.
- Identify the probable feature encountered.
 - Which is the best method they had to apply to overcome the feature.
 - Outline four procedures they had to follow to overcome the feature.
 - With functions, identify three (3) probable instruments used.
19. Carefully study the map exact of Mbeya (sheet **244/4**) provided, then answer the following

Questions;

- By giving evidence from the map, describe two methods used to show relief on the mapped area.
 - With supporting evidence from the map, name four social economic activities carried out in the area.
 - Name any two ways of expressing the scale of the map that have been used.
 - Measure the length of the road from grid reference 425130 to 448131 in kilometers, if Khamis covered the area by a bus and turned back
 - Giving examples, describe the major types of transport of the mapped area
20. Carefully study the weather data for a station in Australia and answer the questions that follow;

| Month | J | F | M | A | M | J | J | A | S | O | N | D |
|---------------|------|------|------|-----|------|----|-----|-----|----|----|-----|-----|
| Temp(°c) | 28.3 | 27.5 | 28.5 | 29 | 26.7 | 26 | 26 | 25 | 24 | 26 | 27 | 28 |
| Rainfall (mm) | 380 | 330 | 240 | 175 | 175 | 5 | 2.5 | 2.2 | 17 | 50 | 210 | 230 |

- Calculate the annual mean temperature for the station
 - Determine the rainfall range
 - Calculate the mean daily temperature
 - Present the temperature and rainfall distribution in a simple graph
 - Identify the type of the climate of the station
21. Suppose you want to conduct a research about a certain issue as directed by your research class teacher
- Outline any seven steps to be followed chronologically

- ii. List down any five advantages of research output in the society.
22. There was a serious conflict between farmers whose plots was nearby each other. They tried to resettle the conflict but they failed and later on they decided to consult the Village Executive Officer to seek the resolution. The Village Executive Officer decided to send the village land resolution team to the field. The team decided to use the method of linear measurement.
- Identify the method of taking measurement used
 - List down any four instruments that were used
 - If the team consisted of three personnel's in taking linear measurement. Who are those?
 - Describe any four significances of using the method identified in (a) above.
23. Study carefully the extract map of Arusha sheet 55/3 provided and answer the questions the follows
- Name the features found on the following grid reference
 - 394375
 - 476322
 - What is the bearing of Temi Hill at grid reference 443253 from Nainasi Hill grid reference 496262
 - How long in kilometres of river Kijasi from grid reference 420305 to grid reference 430347
 - Mention any three major advantages of MERU FOREST RESERVE as shown on the map
 - Comment on the settlement patterns of the area
 - Name two major economic activities conducted on Arusha extract map provided
24. Read carefully the climatic data for station X presented in the table below and answer the questions that follow

| Month | J | F | M | A | M | J | J | A | S | O | N | D |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Temp 0 ⁰ | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 27.2 | 28.3 | 28.3 | 28.3 | 27.7 | 27.2 |
| Rainfall(mm) | 233 | 228 | 244 | 215 | 118 | 91 | 36 | 36 | 51 | 104 | 140 | 196 |

- Calculate total annual rainfall
- Calculate annual range of temperature
- Write a suitable climate of the station
- Find mode of temperature

- v. List down two crops which can be grown in this climatic condition
25. From the following data 7,5,4,3,2,5,8 and 9 find the following
- i. Mean
 - ii. Mode
 - iii. Median
26. Study carefully the map extract of Mbeya (sheet 244/4) and answer the following questions.
- a) With vivid evidence from the map, mention the types of transport shown in the area.
 - b) (i) What are the main function of Mbeya town
 - (ii) Giving example, account for the main activities found in the area.
 - (iii) List physical and man –made features found in the following grid
 - (a) 490145
 - (b) 439133
 - (c) 462214
 - c) Point out three (3) factors which have determined the population distribution in the area.
27. Electra was given the below data which represent crop production in Tanzania in 000 tones.

| YEAR | TYPES OF CASH CROPS | | |
|------|---------------------|------------|---------|
| | COFFEE | SUGAR CANE | TOBACCO |
| 2020 | 200 | 100 | 300 |
| 2021 | 150 | 130 | 200 |
| 2022 | 120 | 100 | 100 |

- a) Show how he will represent data above using compound bar graph
 - b) How compound bar graph value to you. Give three (3) points
 - c) Comment on the trend of production as observed from the graph.
28. When someone wants to conduct a survey he/she has to prepare himself/herself before. Explain the important things Surveyors has to prepare before deciding to conduct a chain survey.
29. (a) Define the term sampling as used in field research.
- (b) Outline the main types of sampling as used in field research.

30. Study carefully the map extract of Mbeya (sheet 244/4) and answer the following questions.

- a) With supporting evidence from the map, describe two methods used to represent relief on the mapped area.
- b) Giving evidence from the map, name four social economic activities carried out in the area.
- c) Calculate the area covered by forest using the square method. Give your answer in km^2 .
- d) By giving evidence from the map, describe three main types of transport found in the mapped area.

31. What is statistics? The following form five students at Malapaka School visited their school library and asked the school librarian some questions on the books of the subjects found in the library. These are some of the information recorded by the students from their library as they shown us in the table below.

| Subjects | No of books available |
|------------------|-----------------------|
| Geography | 86 |
| Chemistry | 90 |
| Biology | 120 |
| B/ mathematic | 74 |
| English language | 60 |
| Kiswahili | 75 |
| Civics | 110 |
| History | 72 |
| Physics | 91 |

By using the data from the table above then

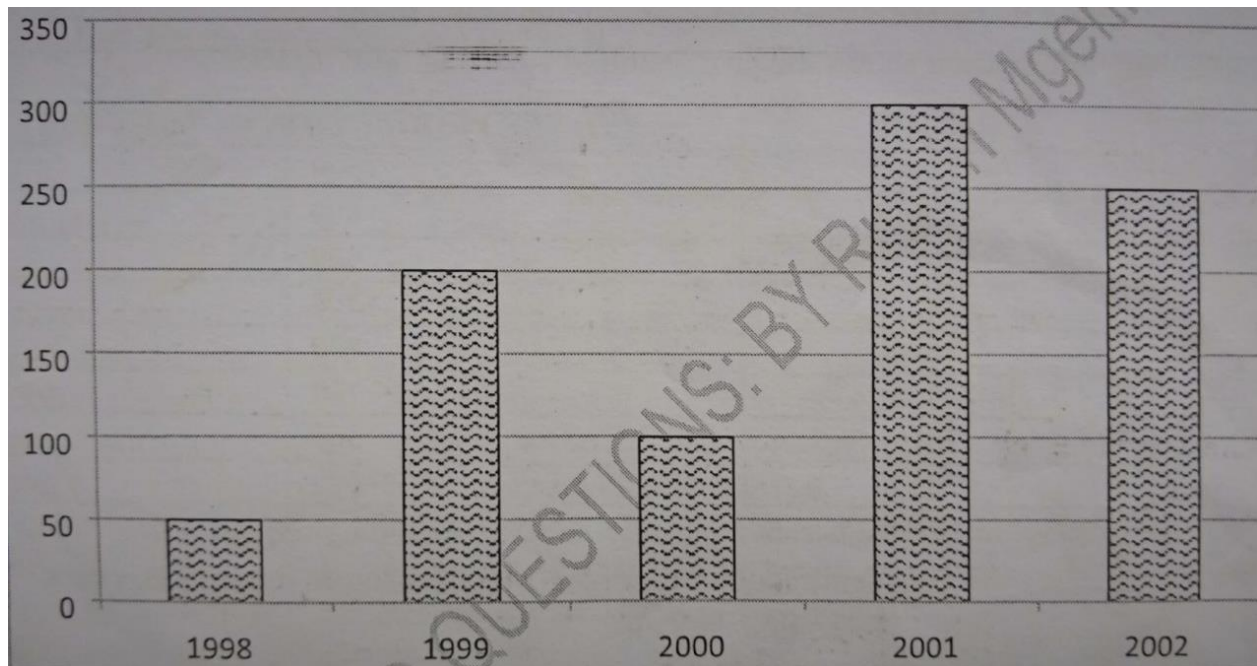
- a) Draw a simple pie chart only four (4) subjects from the top – bottom of the list.
- b) List three(3)n merits and two (02) demerits of method used in (a) above
- c) Suggest two (02) alternative ways of presenting the data above.

32. Imagine you are the village chairman at Mtakuja village and you are expert in land issues. However you have been asked by Mtakuja Ward Executive Officer as an expert of land matters to address on how level the stepped area .then,
- Describe five (5) instruments that you will use to level ground area to be suitable for buildings activities.
 - Name two (2) methods that can be involved in leveling the stepped area above.
33. Ms. Joan is a teacher at Mwenge secondary school who intends to conducts field research on the impact of settlement growth on Mwenge secondary school
- Identify the steps she would follow to conduct research.
 - Mention at least three advantages of that research to that community and school
 - Give five possible challenges to that research.
34. Study careful the map extract of Mbeya (Sheet 244/4) and answer the following questions.
- By using two evidence from the map identify the type of climate of the area.
 - Describe the layout of Mbeya town. Give three points.
 - What factors are likely to have influenced the location of Mbeya town? Give three points.
 - Identify four (4) supportive contents shown on the map given.
35. Denis is a form four student at Mtumba secondary school. After receiving his Mock examination answer sheets he decided to record his scores as follows; 55 – History, 40 – Geography, 68 – Kiswahili, 72 – Civics, 22 – Basic mathematics, 60 – English language, and 30 – Biology.
- Identify the nature of data recorded by Denis.
 - If Denis want to observe fluctuation of items from the mean, which method of data presentation he will use?
 - State three (3) main steps to follow before drawing the graph of data presentation named in (b) above.
 - What are the cons of using the method of data presentation above? (Give three points).
 - Arrange the scorers above in descending order, then compute the mean of the first four subjects' scores.
36. Israel, Rose and Maria are form three students at Dodoma Makalu Secondary students who were appointed by their classmate to represent them in surveying around the school compound. Israel was appointed to be a leader, rose to be a follower and Maria to be a booker but they didn't know their responsibilities during surveying process.
- Suggest the suitable name to call Israel, Rose and Maria in relation to simple chain survey.

Mr. herman

- b. As your geography teacher help them to know their responsibilities by giving three (3) points to each.
37. Most of schools in Chiwombi ward are facing the challenge of girls' students dropping out of school due to early marriage. Mr. Mapunda decided to investigate the reasons behind the phenomenon, but before doing the actual research he decided to go through various written documents related to early marriage.
- Name the activity conducted by Mr. Mapunda before the actual research.
 - What was the importance of activity named in (a) above (four points)?
 - Predict two (2) research hypothesis which might be developed by Mr. Mapunda
 - How the society of Chiwombi ward will be benefited from Mr. Mapunda research output? (Give two points).
38. Carefully study the map extract of HANANG sheet provided (84/4) and then answer the questions that follows
- Name any four indicators that shows the presence of the following economic activities on the map.
 - Tourism
 - Agriculture
 - Mining
 - Calculate area of lake Barangida in km²
 - A farmer was at grid reference 680160. He saw a fire in the North East 5kms.
 - Find/write the grid reference position of the fire
 - Find the direction from the fire to the origin point
 - Name the physical obstacles which the farmer will face if he walks in strait line to the position of the fire.
 - Name and explain how is formed the features found at grid reference 680160....,
 - What are the economic importance of the features you have mentioned in 3(iv) above at least two (02)
 - With evidence from the map name two physical features as depicted on the mapped area.

39. Carefully study the following statistical graph showing sisal production (in tons) in Tanzania from 1998 to 2001 and answer the questions that follow:



- With vivid reason, what type of graph is this?
 - Construct The Graph Which Shows Increasing and Decreasing of Value of geographical phenomenon.
 - Outline five procedures that are used to prepare the graph you have constructed in 4(b) above.
40. The form three surveying team of Chita SS was told by their geography teacher to conduct chain survey around their sport ground, so as to make boundaries of their sport ground. In accomplishing their survey, the team realized that they have collected data with discrepancies due to improper arrangement of the poles.
- What is the term “Discrepancies” as used in chain survey means
 - Identify three people who are involved in form three surveying team at Chita SS
 - What are three things the surveying team supposed to consider that they would have avoided such discrepancy?
 - List down three other sources of discrepancies in chain survey.

41. (a) In any research, the researcher must observe Ethical issues during data collection. As you researcher briefly explain at least five ethical issues that a researcher must consider during data collection.
- b) Outline five Essentials of a good questionnaire
42. Carefully study the map extract of Tabora (sheet 118/2) provided. Then answer the following questions.
- Calculate the distance of railway line from grid reference 837345 to grid reference 800455.
 - With evidence from the map, name three (03) signs used on the map.
 - Describe two types of transport found in the area.
 - Suggest the type of climate of the area using two evidence.
 - Find the bearing and direction of grid reference 785427 from grid reference 760450.
43. Mzee Kaaya has been engaging in agriculture for four years; the production has been varying each year as follows, in 1990 he produced 20tones, in 1991, 58 tones, in 1992 produced 10 tons and 1993 he produced 50 tones.
- Suggest three (03) reasons for the variation of the production
 - Calculate the average of the production.
 - Present the data by using divergent line graph.
44. Magwara from Kiponzelo secondary school was asked by her geography teacher to conduct a research about the reasons for high rate of pregnancies to Kia ward School in Kilimanjaro region.
- Provide two proper methods of data collection
 - Suggest the best research title for the study.
 - Prepare the following from the title you have suggested
 - Research question.
 - Research hypothesis (one point)
 - What difficulties may face Magwara during the research process (5point)
45. The form three surveying team of Ifumwe Secondary school were told by their geography teacher to conduct chain survey around their sport ground so as to make boundaries of their sport ground. In accomplishing their survey, the team realized that they have collected data with discrepancies due to improper arrangement of the poles.
- What is the type of discrepancy the surveying team encountered?
 - What are the three things the surveying team supposed to consider that they would have avoided such discrepancy?

- c) Identify three people who are involved in the form three surveying team at Ifumwe secondary school.
 - d) List down three other sources of discrepancies in claim survey.
46. a) With the support of examples, identify three (3) economic activities carried out in the mapped area.
- b) Calculate the area covered by mbeya forest reserve in kilometer square (km²)
 - c) With evidences from the map given, comment on the type of settlement pattern.
 - d) By using grid references show where iganzo is located in the mapped area.
47. Selina and Jack are students at Ruvu secondary school. One day they organized a study tour to Ruvu River in order to learn various functions performed by the river. During the tour they observed the river carrying out weathered and eroded materials from one place to another.
- a) Name the process involved in carrying out the weathered materials from one place to another.
 - b) Explain four (4) ways in which the process in (a) above operates.
 - c) Mention five (5) factors that can affect the process mentioned in (a) above.
48. Form three students at Bukimau secondary school were carrying out a survey in area where the school laboratory would be built so as to enhance the improvement of science subjects. You as a geographer,
- a) Suggest three (3) stages in which form three students should follow during conducting a survey.
 - b) Draw any five (5) equipments which form three students could have use during conducting a survey.
 - c) What hindrances they have encountered during conducting their survey? (Three (3) points)
49. There are the statements that no research no right to speak, this reveal that research is always both systematic and purposeful. With vivid examples explain at least five (5) stages of conducting research.
50. Study the map extract of Arusha sheet 55/3 and then answer the following questions
- a) Describe the relief of the area
 - b) With reasons, comment on the distribution of settlement
 - c) What guided the map maker in drawing this map (list down two)
 - d) Mwajuma was at Mwangula school grid reference 260230; she saw a flying bird at 135°SE. The same bird was seen by Oresta at 225° SW who stood at Ngurobob grid reference 320250.

- a. Determine the position of the flying bird by grid reference
 - b. By using the given RF scale measure the distance between Oresta and the flying bird and write your answer in kilometer
 - e) Describe the nature of transport in the mapped area.
51. Emmanuel got the following scores in Geography examination in the year 2018. He wanted to summarize the scores in a simple way so that he shows the rise and fall of the scores across time.
- January monthly test – **56**
February monthly test – **60**
March monthly test – **76**
April monthly test – **86**
May monthly test – **70**
May Terminal – **50**
Midterm (September) – **40**
Annual (December) – **35**
- a. What is the best way Emmanuel can use to show the rise and fall of his scores in Geography?
 - b. Draw the graph as suggested in 4(a) above.
 - c. Mention two other ways for summarizing the scores above
 - d. List down four advantages of the method used in 4 (a) above.
52. In a certain school students were tasked by the Sports master to construct a football pitch at Elohim Boys' Secondary school that could be used during friendly match with a nearby school. The students decided to use surveying knowledge acquired in the classroom hence they opted for the use of leveling.
- a) Describe five important instruments which could be used
 - b) Explain three procedures they followed during leveling
53. Asha and Katusime conducted research about Corona virus in China 2019, after finishing they decided to write the report about their findings. Describe the importance of research findings to the developing country like Tanzania.
54. Study carefully the map extract of **Songwe river** sheet 244/3 then answer the following questions:-
- (a) Measure the distance of the railway in kilometer from grid reference (070120) to (130121).
 - (b) With evidences identify the possible climate type of the map
 - (c) Calculate the area covered by the forest. Give your answer in km²
 - (d) Find the back bearing of Mbulu hill (067113) from Shenje hill (016142)

(e) With reasons state four economic activities and two social activities taking place in the area

55. Study the cash crop production in East Africa in tones.

| CROPS | COFFEE | SISAL | COCONUT | COTTON | OTHERS |
|---------------|---------------|--------------|----------------|---------------|---------------|
| PERIOD | | | | | |
| 1990 | 720 | 600 | 400 | 800 | 900 |
| 1991 | 800 | 700 | 500 | 700 | 800 |
| 1992 | 850 | 850 | 700 | 850 | 900 |

(a) Draw group Bar graph to show the crops.

(b) Comment on the trend of production.

(c) List two merits and demerits of the graph

56. (a) What is chain surveying?

(b) Describe any five (5) instruments used in chain surveying.

57. (a) Define the term research tools.

(b) Briefly, explain the main research tools which are used during data collection.

58. (a) Define the following terms as used in photography

i. Photography

ii. Photographer

iii. Camera

(b) Explain the main parts of photography

(c) Outline four advantages of photograph over map

59. Study the map extract of **HANANG** sheet **84/4** and then answer the following questions:

a) Calculate the approximate area of Balangida (salt and soda) lake on the mapped area in kilometer squares.

b) With evidences from the map, identify three main ways used to depict relief features on the mapped area.

c) Relate main relief features and settlement pattern shown on the mapped area.

d) With reasons, describe three rock types shown on the map.

e) State vertical contour interval (V.I) used in this topographical map.

- f) By using evidences on the map, discuss four main land use pattern shown on the mapped area.

60. Carefully study the table below, then answer the questions that follow:

| Class | Frequency |
|--------------|------------------|
| 55 – 59 | 8 |
| 50 – 54 | 5 |
| 45 – 49 | 10 |
| 40 – 44 | 5 |
| 35 – 39 | 2 |
| TOTAL | 30 |

Calculate:

- (i) Mean value
 - (ii) Median
 - (iii) Median class
 - (iv) Standard deviation
61. “Research is a systematic process and it involves a logical manner in order to obtain a meaningful and reliable information”. Justify this statement by giving the first eight (08) stages of research process.
62. (a) Define the following terms as applied in survey:
- (i) Chain survey
 - (ii) Offsets
 - (iii) Tie line
- (b) By giving reasons, describe the importance of surveying in our daily life.
63. (a) (i) By using diagram show the three main parts of ground photographs.
(ii) Describe main distinctive features of oblique photographs.
64. Mr. Msemakweli is a professional photographer at your school, he wanted to produce form four photo-entry form and identification cards for all form four students at your school.
- (i) Identify the type of photograph that Mr. Msemakweli was likely to take.
 - (ii) Describe three advantages and disadvantages of the photograph named in (b) (i) above.

65. Study the map extract of Arusha (sheet 55/3) provided then answer the question that follows;
- a) Describe relief features found in the area.
 - b) Measure the distance of Great North Road in kilometers from grid reference 240237 to 370278.
 - c) With reasons, identify the type of settlement pattern found in the area.
 - d) Calculate the area covered by Burka Estate in square kilometers.
 - e) Name the major economic activities that take place in the area.

66. The table below shows the hypothetical data for cash crops production in Tanzania from 2017–2019 (in “000”tones)

| YEAR | TEA | COFFEE | TOBACCO |
|------|-----|--------|---------|
| 2017 | 100 | 500 | 300 |
| 2018 | 200 | 400 | 500 |
| 2019 | 250 | 200 | 300 |

- a) Present the data by means of a grouped bar graph.
- b) State five advantages of this method of presenting data as used in (a) above.
- c) Comment on the trend of coffee for that three years.

67. (a) Give the meaning of the following terminologies as used in surveying;

- (i) Plane table survey
- (ii) Prismatic Compass Survey
- (iii) Chain Survey

(b) Define leveling and mention six equipments used in leveling process.

68. Suppose you are the student of Mikakati Secondary school located at Mipango village in Simiyu region. After completion of the topic of research, you are asked by your teacher to conduct a research on Corona virus which is spreading very fast in your village.

- a) Suggest the best research title for the study

- b) What data collection method will you prefer? Support your answer with four reasons.
 - c) State the sampling techniques that you might have employed in selecting the sample.
 - d) State any two difficulties you might face when conducting the research.
69. Study the map carefully study the data given on the table below and then answer the questions that follow:

| Class | Frequency |
|---------|-----------|
| 20 - 24 | 3 |
| 25 - 29 | 7 |
| 30 - 34 | 8 |
| 35 - 39 | 12 |
| 40 - 44 | 9 |
| 45 - 49 | 6 |
| 50 - 54 | 4 |
| 55 - 59 | 1 |
| 60 - 64 | 0 |

- (a) Find the:-
 - (i) Mean
 - (ii) Mode
 - (b) Briefly explain four types of line graph
70. (a) The ministry of education of united republic of Tanzania under National Examination Council past five years, was in research about why there was mass failure of pupils in primary schools. This made the government take sample of schools to make their research. As a student who studied a research topic, give only five reason why the ministry decided to use sample of schools to complete its research?
- (b) Briefly explain the following
 - i. Primary data.
 - ii. Secondary data.
71. (a) Name three kind of obstacles that hinders taking direct measurement during surveying.
- (b) Explain five main sources of mistakes during chain survey.
72. Study the map extract of Ilonga (**Sheet 265/2**) and answer the following questions
- (a) Giving examples, account for the main activities found in the area.

(b) With evidences from the map state the settlement pattern(s) of an area.

(c) What is the feature found at the grid-reference 660000?

73. Carefully study the following information in the table below that shows students enrolment at Lukonde Secondary School and then answer the questions that follows:-

| FORM I | FORM II | FORM III | FORM IV |
|--------|---------|----------|---------|
| 60 | 110 | 90 | 35 |

(a) Present the data by using divergence line graph

(b) Outline two merits of using the method in (a) above

74. Mr. Zumbukuku wants to conduct a research concerning students drop out in Zuzu village, where the majority of its population do not know how to read and write.

- a) Identify research problem under which the study is based upon.
- b) What is the best primary data collection method that Mr. Zumbukuku should use in order to collect reliable information about the problem? Give one reason.
- c) Describe consecutively four first stages he will pass through to conduct the research

75. There is a land conflict between investors and the local people of Chikundi village at Masasi District in Mtwara Region. As student of Land surveyor at Ardhi University and inhabitant of the area you decided to invite the surveyor team which is dealing with chain survey for a long time to determine and solve the conflict in the village. During conducting the survey they forget some tools which led to a wrong measurement.

- i. What are discrepancies made in that exercise
- ii. List three (3) sources which led to wrong measurement in chain survey.
- iii. Describe the major two (2) instruments used to measure distance in chain survey

76. Carefully study the map extract of Tabora (sheet 118/2 provided). Then answer the following

Questions.

- a) Calculate the distance of railway line from grid reference 837345 to grid reference 800 455.
- b) With evidence from the map, name three (03) signs used on the map.
- c) With evidence from the map, describe two types of transport found in the area.
- d) Suggest the type of climate of the area, using two evidences.
- e) Find the bearing and direction of grid reference 785427 from grid reference 760450.

77. Mzee Kamhanda has been engaging in agriculture for four years. The production has been varying each year as follows; in 1990 he produced 20 tones, in 1991 58 tones, in 1992 10 tones and 1993 50 tones. Suggest three (03) reasons for the variation of the production
- Calculate the average of the production
 - Present the data by using divergent line graph.
78. Kisawani from Itilima secondary school was asked by her geography teacher to conduct a research about the reasons for high rate of pregnancies to Kaliua ward schools in Tabora region.
- Suggest two proper methods of data collection.
 - Suggest the best research title for the study.
 - Prepare the following from the title you have suggested.
 - Research question.
 - Research hypothesis.
 - What difficulties may face Kisawani during the research process (4 points).
79. The form three surveying team of Msamara secondary school were told by their geography teacher to conduct chain survey around their sport ground so as to make boundaries of their sport ground. In accomplishing their survey, the team realized that they have collected data with discrepancies due to improper arrangement of the poles.
- What is the type of discrepancy the surveying team encountered?
 - What are the three things the surveying team supposed to consider that they would have avoided such discrepancy?
 - Identify the three people who are involved in the form three surveying team at Msamara secondary school.
 - List down three other sources of discrepancies in chain survey.
80. Carefully study the map extract of SONGWE RIVER (sheet 244/3) and then answer the following questions:
- Measure the length of railway line from grid reference 070120 to 128123.
 - Name four physical features found on the area.
 - Calculate the area covered by forest in km^2 using grid square method.
 - With two evidences suggest the type of climate where the map is taken
 - Suggest two types of vegetation found in the area.
81. Study the data of milk production from Biharu diary in 2009 – 2013 in liters (g/m^3) and answer the questions that fallows;

| | | | | | |
|--------|------|------|------|------|------|
| Year | 2009 | 2010 | 2011 | 2012 | 2013 |
| Liters | 40 | 60 | 80 | 90 | 110 |

- a) Present the above data using bar graph which show profit and loss values.
 - b) Mention two (02) merits and (02) demerits of the graph.
 - c) Apart from the method used above list down other two methods to present the data above.
 - d) Calculate;
 - (i) Range
 - (ii) Median
82. There was a serious conflict between two famers whose plots were nearby each other. They tried to resettle the conflict but they failed and later on they went to Village Executive Officer to seek the resolution. The Village Executive Officer decided to send the village land resolution team to go to the field to resettle the conflict. The team decided to use the method of linear measurement in surveying.
- (a)Identify four advantages of the method used
 - (b)List down three disadvantages of the method used
 - (c)What are the four possible sources of errors of the method used?
83. In 2020, form four students from Jitegemee secondary school conducted a research about effects of early pregnancy to girls at a certain village. Finally, they submitted the report to the head of School.
- a) What were the main three (3) objectives of the research?
 - b) Propose three (3) methods which might be used to collect data.
 - c) Explain two (2) problems that possibly faced them when collecting data.