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|  | SCHEME OF WORK FORM FOUR GEOGRAPHY TERM ONE 2019 | | | | | | |  |
| WK **NO** | L/ **NO** | TOPIC/ **SUBTOPIC** | | **LESSON / SPECIFIC** OBJECTIVES | **TEACHING / LEARNING** ACTIVITIES | ***MATERIALS***  ***/***  ***RESOURCES*** | REF. | REM. |
| 1 | 1 | STATISTICAL METHODS OF PRESENTING DATA Age- sex pyramids. | | By the end of the lesson, the learner should be able to:  Define the term cohort.  Recall steps for constructing an age-sex pyramid. | Q/A: review previously studied statistical methods of presenting data.  Examine population census results of age and sex.  Teacher explains construction of an age-sex pyramid. | *Census results.* | KLB BOOK IV  Pg 1-2 |  |
| 2 | Age- sex pyramids. | | By the end of the lesson, the learner should be able to:  Construct an age-sex pyramid. | Supervised practice;  Written exercise. | *Tabulated data.* | Pg 2-3 |  |
| 34 | Analysis and interpretation of age-sex pyramids.  Advantages and disadvantages of age-sex pyramids | | By the end of the lesson, the learner should be able to:  Analyse and interpret age-sex pyramids.  State advantages and disadvantages of presenting data in form of age- sex pyramids. |  | *Charts – types of age- sex pyramids.* | Pg 2-3 |  |
| 5 | Dot maps/ Distribution maps. | | By the end of the lesson, the learner should be able to:  Explain factors taken into consideration when constructing a dot map. | Expository approach:  Teacher explains significance of dot value, dot size and dot location.  Simple calculations. |  | Pg 3-4 |  |
| 2 | 1-2 | Constructing dot maps. | | By the end of the lesson, the learner should be able to:  Construct dot maps. | Exposition of steps for constructing dot maps.  Practical activity- making dot maps.  Supervised practice. | *Calculators, tabulated data.* | Pg 4-5 |  |
| 3 | Advantages & disadvantages of dot maps. | | State advantages & limitations of dot maps. | Review previous assignment.  Brief discussion on construction of dot maps.  Assignment. |  | Pg 5 |  |
| 4 | Choropleth maps. | | Draw a choropleth map. | Teacher exposes and explains new concepts related to choropleth maps.  Written exercise. |  | Pg 6-7 |  |
| 5 | Advantages & disadvantages of choropleth maps. | | State advantages & disadvantages of chloropleth maps. | Probing questions;  Brief discussion. |  | Pg 7 |  |
| 3 | 1 | LAND RECLAMATION Introduction.  Irrigation schemes in Kenya. | | Define the terms land reclamation and land rehabilitation.  Identify various irrigation schemes in Kenya. | Probing questions related less useful land;  Brief discussion. | *Map: distribution of irrigation schemes in Kenya.* | Pg 9-10 |  |
| 2 | Mwea-Tebere irrigation scheme. | | State factors influencing location of the scheme.  Describe establishment of the scheme. | Probing questions;  Detailed discussion on case study. |  | Pg 10-11 |  |
| 3 | Perkerra irrigation scheme. | | State factors influencing location of the scheme.  Describe establishment of the scheme. | Probing questions;  Detailed discussion on case study. |  | Pg 11-12 |  |
| 4 5 | Significance of irrigation farming in Kenya.Problems associated with irrigation farming in Kenya. | | Outline significance of irrigation farming in Kenya.  Outline the problems associated with irrigation farming in Kenya. | Q/A & brief discussion.  Brain storming;  Q/A & brief discussion. |  | Pg 12-13 |  |
| 4 | 1 | Methods of land reclamation. Irrigation. | | Outline types of irrigation. | Exposition of new concepts;  Brief discussion. |  | Pg 14-15 |  |
| 2 | Drainage of swamps & pest control. | | Describe drainage of swamps, control of floods & pest controlas methods of land reclamation. | Detailed discussion with probing questions. |  | Pg 13,15 |  |
| 3 | Other methods of land reclamation. | | Explain other methods of land reclamation. | Exposition of new concepts;  Probing questions;  Brief discussion. |  | Pg 16-18 |  |
| 4-5 | Land reclamation in the Netherlands. | | Outline methods of land reclamation in the Netherlands.  Describe land rehabilitation in the Netherlands;  State the benefits of the **Zuyder Zee project.** | Expository approach & case studies on **Zuyder Zee project.**  Brief discussion on benefits of the projects. | *World map: location of the Netherlands.* | Pg 18-19 |  |
| 5 | 1-2 | Land reclamation in the Netherlands. | | Highlight features of **Delta Plan** project.  State the benefits of the **Delta Plan** project. | Expository approach & case studies on **Delta Plan** project.  Brief discussion on benefits of the project;  Topic review questions. |  | Pg 20-21 |  |
| 5 | 3 | FISHING Factors influencing fishing. | | Define the terms fishing and fish-farming.  Outline factors influencing fishing. | Q/A and brief discussion on influence of presence of planktons, ocean currents, nature of coastline, capital, market and transport.  Assignment. | *Map- ocean currents of Africa.* | Pg 22-23 |  |
| 4,5 | Types of fish & Methods of fishing. | | Identify types of fish.  Outline methods of fishing.  State advantages & disadvantages of specific methods of fishing. | Teacher exposes and explains new concepts related to types of fish and fishing methods.  Probing questions on advantages & disadvantages of each method. |  | Pg 25-28 |  |
| 6 | 1 | Major fishing grounds in the world.  - Atlantic fishing grounds. | | Account for the extensive and highly developed fish farming in the Atlantic fishing grounds. | Discussion on Atlantic fishing grounds. | *Illustrative maps.* | Pg 28-32 |  |
| 2-3 | - Pacific fishing grounds. | | Account for the extensive and highly developed fish farming in the Pacific fishing grounds. | Discussion on Atlantic fishing grounds;  N.E. Asia, West America. | *Illustrative maps.* | Pg 32-33 |  |
| 4 | Fishing grounds in Africa. | Identify major fishing grounds in Africa. | | Descriptive approach.  Assignment method. | *Illustrative maps – fishing grounds in Africa.* | Pg 33-35 |  |
| 5 | Fishing in Kenya. | | Describe marine fishing and inland fishing in Kenya. | Q/A & brief discussion.  Superficial case studies. | *Map: drainage system in Kenya.* | Pg 35-38. |  |
| 7 | 1-2 | Fish farming in Kenya. | | Cite significance of fish farming in Kenya and reasons why it should be encouraged.  State advantages & disadvantages of fish farming compared to other farming methods.  Describe establishment of fish farming in Kenya. | Brain storming,  Brief discussion. |  | Pg 38-40 |  |
| 3 | Problems associated with fishing industry in Kenya. | | Identify problems associated with fishing industry.  Suggest possible solutions to the problems. | Brain storming,  Brief discussion. |  | Pg 44-47 |  |
| 4,5 | TEST & MID –TERM BREAK | | |  |  |  |  |
| 8 | 1 | Management and conservation of fisheries in Kenya. | | Outline some measures involved in the management and conservation of fisheries in Kenya. | Brief discussion on management and conservation measures. |  |  |  |
| 2 | Fishing in Tanzania. | | Describe marine fishing and inland fishing in Tanzania. | Q/A & brief discussion.  Superficial case studies. | *Map: drainage system in Tanzania.* | Pg 40-41 |  |
| 3 | Fishing in Uganda. | | Describe marine fishing and inland fishing in Uganda. | Q/A & brief discussion.  Superficial case studies. | *Map: drainage systems in Uganda.* | Pg 41-43 |  |
| 4-5 | Fishing in Japan. | | Account for establishment and development of fishing in Japan. | Case study. | *Map showing location of Japan.* | Pg 47-48 |  |
| 9 | 1 | WILDLIFE AND TOURISM Distribution of wildlife in East Africa. | | Explain the factors influencing distribution of wildlife in East Africa. | Detailed discussion.  Q/A and brief discussion. | *Map: distribution of major game parks in East Africa.* | Pg 50-52 |  |
| 2 | Game Parks in East Africa. | | Identify major national parks, national reserves and game sanctuaries in East Africa. | Locating Game Parks in East Africa on the map;  Discuss distribution of the Game Parks. |  | Pg 52-53 |  |
| 3 | Significance and problems facing Wildlife in East Africa. | | Outline the significance of wildlife in East Africa.  Outline problems facing wildlifein East Africa.  Suggest possible solutions to the problems. | Oral questions;  Explanations and open discussion. |  | Pg 54-57 |  |
| 4-5 | Management and conservation of wildlife in East Africa. | | Highlight some of the measures being taken to conserve wildlife in East Africa. | Probing questions & discussion. | *Newspaper cuttings.* | Pg 57-59 |  |
| 10 | 1 | Tourism: Introduction.  Factors of tourism in Kenya. | | Define the terms tourism, eco-tourism, domestic tourism and international tourism.  Explain factors influencing tourism in Kenya. | Probing questions;  Exposition of new terms.  Detailed discussion. |  | Pg 59-64 |  |
| 2 | Tourist attractions in Kenya. | | Identify tourist attractions in Kenya. | Give specific examples of tourist attractions. |  | Pg 64-69 |  |
| 3 4 | Significance of tourism.  Problems associated with tourism. | | Outline benefits of tourism to Kenya.  Identify problems associated with tourism. | Give specific examples of tourism benefits.  Give specific examples ofproblems associated with tourism. | *Newspaper extracts.* | Pg 69-73 |  |
|  | 5 | Tourism in Switzerland. | | Account for development of tourism industry in Switzerland. | Superficial case study. | *Map: location of Switzerland.* | Pg 71 |  |
| 11 | 1 | **ENERGY**  Renewable sources of energy. | | Identify renewable sources of energy. | Probing questions;  Brief discussion. |  | Pg 75-80 |  |
| 2 | Non- renewable sources of energy | | Identify non- renewable sources of energy. | Brain storming;  Brief discussion. |  | Pg 80-82 |  |
| 3-4 | H.E.P. stations & geothermal stations in Kenya. | | Describe establishment and development of H.E.P. & geothermal stations in Kenya. | Brain storming;  Brief discussion. | *Map: HEP stations in Kenya.* | Pg 83-85 |  |
| 5 | H.E.P. stations in Uganda. | | Describe establishment and development of H.E.P. stations in Uganda. | Brief discussion. | *Map: HEP stations in Kenya.* | Pg 85-86 |  |
| 12-13 | END OF TERM ONE EXAMINATIONS | | | | | | |  |

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|  | SCHEME OF WORK FORM FOUR GEOGRAPHY TERM TWO 2019 | | | | | |  |
| WK **NO.** | L/ **NO.** | TOPIC/ **SUBTOPIC** | **LESSON / SPECIFIC** OBJECTIVES | **TEACHING / LEARNING** ACTIVITIES | ***MATERIALS***  ***/***  ***RESOURCES*** | REF. | REM. |
| 1 | 1 | Geothermal power projects in Africa. | Identify major geothermal power sites in Africa. | Brief case study on Kariba and Akosombo dams. | *Map- HEP power projects in Africa.* | Pg 86-87 |  |
| 2 | Energy crisis. | Explain some emerging issues related to energy crisis. | Brief discussion & probing questions. |  | Pg 89-90 |  |
| 3-4 | Management and conservation of energy. | Outline measures taken to manage and conserve energy. | Brief discussion with probing questions.  Review questions. |  | Pg 91 |  |
| 5 | INDUSTRY Introduction.  Definition and importance. | Define the terms industry and industrialization.  Give reasons why industrialization is essential. | Brain storming;  Discussion. |  | Pg 93-97 |  |
| 2 | 1 | Types of industries. | Describe the main types of industries in Kenya. | Give examples of each type |  | Pg 98-102 |  |
| 2 | Jua kali industries. | Explain the role of *jua kali* industries in the growth of an economy. | Oral questions, brief discussion. |  | 103- 107 |  |
| 3-4 | Distribution of Agricultural industries in Kenya. | Describe the distribution of Agricultural industries in Kenya. | Cite specific examples and the materials dealt in. |  |  |  |
| 5 | Distribution of non-agricultural industries in Kenya. | Describe the distribution of non-agricultural industries in Kenya. | Cite specific examples and the materials dealt in. |  |  |  |
| 3 | 1,2 | Significance of industrialization in Kenya. | Highlight the significance of industrialization in Kenya. | Oral questions, brief discussion. |  |  |  |
| 3,4 | Problems facing industrialization & industries in Kenya. | Identify problems facing industrialization & industries in Kenya*.*  Suggest possible solutions to the problems. | Q/A & brief discussion. |  | Pg 104-5 |  |
| 51,2 | Cottage industry in India. Iron & steel industry in the Ruhr region. | Describe cottage industry in India*.*  Explain the success of cottage industry in India.  Explain factors that have led to development of iron & steel industry in the Ruhr region of Germany. | Brief discussion.  Give examples of activities in Cottage industry.  Expository approach with specific examples. | *Map: industrial centers of India & Germany.* | Pg 104-7  Pg 113 |  |
| 4 |
| 3,4 5 | Car manufacturing &Electronics industry in Japan. | Explain factors that have led to development of car manufacturing & electronics industryin Japan. | Expository approach with specific examples. | *Maps: Japan’s major industrial centres.* | Pg 116-118 |  |
| 5 | 1-2 | TRANSPORT & COMMU.NICA-TION. Introduction.  Road transport. | Define the terms transport, communication & tele-communication.  State advantages & disadvantages of road transport.  Identify problems facing road transport.  Suggest ways of combating these problems. | Brainstorming, brief discussion; | *Pg 120-21* |  |  |
|  | 3 | Railway transport. | State advantages & disadvantages of railway transport.  Identify problems facing railway transport in Africa. | Oral questions, brief discussion. | *Pg 121-2* |  |  |
| 4 | Water transport. | Cite reasons for development of water transport in Africa.  State advantages & disadvantages of water transport.  Identify problems facing water transport in Africa. | Q/A ,brief discussion. |  | Pg 123-4 |  |
| 5 | Air transport. | Cite reasons for development of air transport in Africa.  State advantages & disadvantages of air transport.  Identify problems facing air transport in Africa. | Q/A, brief discussion. | *Maps: major airports in Africa.* | Pg 124 -5 |  |
| 6 | 1 | C.A.T. & MID –TERM BREAK | |  |  |  |  |
| 2 | Pipelines, lifts & escalators. | State advantages & disadvantages of pipelines, lifts *&* escalators. | Brief discussion, Q/A. |  | Pg 126 |  |
| 3 | Types of communication systems. | Identify types of communication systems in Africa. | Q/A, discussion & exposition of new concepts e.g. Facsimile, internet and  e-mail. |  | Pg 127-8 |  |
|  | 4 | Major lines of transport in Africa. | Identify major lines of transport in Africa. | Locate major roads, railway lines, airlines and waterways on a map. | *Illustrative maps.* | Pg 129 |  |
| 5 | Role of transport& communication. | Explain the role of transport & communication in the economic development of Africa. | Brainstorming, probing questions & discussion. |  | Pg 134-8 |  |
| 7 | 1 | Problems facing transport and communication in Africa. | Identify major problems facing transport and communication in Africa.  Highlight efforts being made to combat these problems. | Probing questions & discussion. |  | 136-7 |  |
| 2,3 | Great Lakes and St. Lawrence Seaway. | Identify the Great Lakes of North America.  List down aims of St. Lawrence Seaway project. | Brief case study on of St. Lawrence Seaway project. | *Map: Great Lakes and St. Lawrence Seaway.* | Pg 140-1 |  |
| 4-5 | Great Lakes and St. Lawrence Seaway. | Enumerate benefits of the project.  Identify the role of the projects in the economies of USA and Canada. | Brief case study on of St. Lawrence Seaway project. |  | Pg 140-1 |  |
| 8 | 1 | TRADE Types of trade. | Identify and describe types of trade. | Brainstorming, probing questions and discussion on types of trade. |  | Pg 143-5 |  |
| 2 | Factors influencing trade. | Identify factors that make trade possible. | Q/A & Discussion. |  | Pg 146-7 |  |
| 3 | Significance of trade to Kenya. Problems facing trade in Kenya***.*** | Explain the significance of trade to Kenya.  Identify major problems facing trade in Kenya. | Oral questions, brief discussion. | *Balance of trade charts.* | Pg 149-152 |  |
| 4-5 | Regional Trade Blocs. | Describe establishment of regional trade blocs.  Identify member countries of Regional Trade Blocs.  Highlight benefits of Regional Trade Blocs.  Identify problems facing Regional Trade Blocs. | Descriptive approach on COMESA, SADC, and AU.  Assignment. |  | Pg 154-6 |  |
| 9 | 1-2 | Regional Trade Blocs. (contd) | Describe establishment of regional trade blocs.  Identify member countries of Regional Trade Blocs.  Highlight benefits of Regional Trade Blocs.  Identify problems facing Regional Trade Blocs. | Descriptive approach of discussing WTO, ECOWAS, AGOA |  | Pg 146 - 8 |  |
| 3 | POPULATION Population distribution in East Africa. | Define the term demography.  Explain factors influencing population distribution in East Africa. | Brain storming.  & discussion. |  | Pg 162-165 |  |
| 4 | Population growth. | Explain factors that influence population growth. | Exposition and explanation of new terms e.g. fertility, fecundity, mortality, milieu variables, e.t.c |  | Pg 165-6 |  |
| 5 | Tools of detecting population growth. | Identify tools of detecting population growth. | Brief discussion on census and sample surveys. |  | Pg 166-8 |  |
| 10 | 1 | Migration. | Identify causes of migration.  Identify types of migration. | Q/A & discussion. |  | Pg 168-9 |  |
|  | 2 | Crude birth rate & crude death rate. | Define the terms crude birth rate & crude death rate***.***  Calculate crude birth rate & crude death rate***.*** | Exposition of new concepts;  Worked examples;  Problem solving. |  | Pg 172-3 |  |
| 10 | 3-4 | Population trends. | Explain the population transition theory.  Identify the four demographic transition phases. | Probing questions & expository approach:  Teacher exposes and explains the new concepts relating to demographic trends. | *Chart: demographic trends.* | Pg 173-4 |  |
| 5 | Slow population growth rate. | Identify factors leading to slow populationgrowth rate***.***  Highlight problems associated with slow population growth rate. | Q/A, brief discussion on effects of famine, epidemics, FP practices, emigration, etc. |  | Pg 175-6 |  |
| 11 | 1 | Population growth in Kenya. | Explain factors influencing Kenya’s rapid population growth rate. | Examine actual population growth figures.  Discussion and questioning. |  | Pg 176-9 |  |
| 2-3 | Population structure in Kenya. | Describe structure of Kenya’s population. | Examine population pyramids;  Discuss observations. |  | Pg 178-9 |  |
| 4 | Consequences of Kenya’s rapid population growth rate. | Explain the socio-economic consequences of Kenya’s rapid population growth rate. | Probing questions, open discussion. | *Population census results/ population fact file.* | Pg 180-3 |  |
| 5 | Distribution of population in Sweden. | Identify factors influencing distribution of population in Sweden.  Highlight factors contributing to slow growth population rate in Sweden. | Discussion: comparative view on Kenya’s and Sweden’s populations.  Assignment. |  | Pg 184-5 |  |
| 12-13 |  | END OF TERM TWO ASSESSMENT TEST | | | | |  |

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|  | SCHEME OF WORK FORM FOUR GEOGRAPHY TERM THREE 2019 | | | | | |  | |
|  | L/ **NO.** | TOPIC/SUBTOPIC | **LESSON / SPECIFIC**  *OBJECTIVES* | **TEACHING / LEARNING** ACTIVITIES | ***MATERIALS***  ***/***  ***RESOURCES*** | REF. | REM. |
| 1 | 1 | SETTLEMENT Types of settlements. | Define the term settlement.  State types of settlements. | Probing questions; discussion. |  | Pg 186-7 |  |
| 2 | Location and patterns of settlements. | Explain factors influencing location and patterns of settlements. | Q/A & discussion on geographical, economical factors, cultural factors etc. |  | Pg 187-191 |  |
| 3-4 | Patterns of settlement. | Identify various patterns of settlement. | Exposition & explanations on: nucleated, linear, dispersed and other complex settlement patterns. |  | Pg 191-2 |  |
| 5 | Major urban centres in East Africa. | Identify categories of urban centres in East Africa; and give examples in each case. | Brief discussion giving specific examples. | Map: major East Africa urban centers. | Pg 193-4 |  |
| 2 | 1 | Growth of major urban centers in East Africa. | Explain factors influencing growth of major urban centers in East Africa. | Brief discussion. |  | Pg 195-6 |  |
|  | 2 | Thika as an industrial centre.Kisumu as a lake port. | Outline factors favouring growth of Thika as an industrial centre.  Identify problems facing Thika as an industrial centre.  Outline factors favouring Kisumu as a lake port***.***  Identify problems facing Kisumu as a modern lake port. | Case studies. |  | Pg 198-9 |  |
| 3 | Eldoret as an agricultural collecting centre and administrative centre. | Outline factors favouring  Eldoret as an agricultural collecting centre and administrative centre***.***  Identify problems facingEldoret as an agricultural collecting centre and administrative centre***.*** | Q/A;  Case study;  Assignment. |  | Pg 200-1 |  |
| 4-5 | Nairobi City. | Trace the growth of Nairobi to city status.  Outline factors favouring growth of Nairobi.  Identify problems facing Nairobi as a city. | Probing questions & brief discussion.  Case study. |  | Pg 201-4 |  |
| 3 | 1 | New York City. | Outline factors influencing growth of New York city.  Identify problems facing New York City. | Probing questions & brief discussion.  Case study. |  | Pg 204-7 |  |
| 3 | 2-3 | Mombasa. | Trace history and growth of Mombasa.  Outline factors influencing growth of Mombasa.  Identify problems faced by Mombasa as a city. | Exposition, explanations and discussion. |  | Pg 207-211 |  |
| 4 | Rotterdam. | Identify factors leading to growth of Rotterdam to an international port. | Exposition & explanations. |  | Pg 211-2 |  |
| 5 | Effects of urbanization. | Outline effects of urbanization. | Brain storming;  Discussion. |  | 212-5 |  |
| 4 | 1 | MANAGEMENT& CONSERVA-TION OF THE ENVIRONMENT Introduction.  Environmental conservation. | Define the terms environment, social environment, ecosystem, biodiversity, and environmental management.  Give reasons for conserving the environment | Probing questions, exposition of new concepts & explanations. |  | Pg 216-8 |  |
| 2 | Specific environmental hazards. | Describe some methods of combating floods, lightning, windstorms, pests and diseases. | Q/A, discussion, exposition of new concepts. |  | Pg 224-230 |  |
| 3-4 | Pollution. | Describe air pollution, water pollution and sound & land pollution.  Explain ways of combating pollution. | Examples of gases / activities leading to pollution;  Discussion. |  | Pg 230-235 |  |
| 5 | Environmental conservation measures in Kenya. | Outline measures carried out to manage and conserve the environment. | Q/A, brief discussion on public awareness, public education, legislation, the Water Act, and other Acts etc. |  | Pg 236-240 |  |
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