19. ENERGY

This topic entails:

(i) Definition of energy
(ii) Discussion of sources and types of energy.
(iii) Discussion of the development of electric power projects in Kenya and Uganda.
(iv) Identifying and locating other power projects in Africa
(v) Explaining the significance of energy
(vi) Explaining the impact of the energy crisis in the world.
(vii) Discussing ways and means of managing and conserving energy.
(viii) Identifying sources and uses of energy within the local environment.

1. (a) Name two oil producing countries in the middle East
   (b) Give three contributions of oil to the economies of Middle East countries

2. (a) What is a multi-purpose project?
   (b) Name two multi-purpose projects in Africa

3. (a) (i) Name five renewable sources of energy
        (ii) State three disadvantages and three advantages of wind as source of energy

   (b) (i) What is geothermal power?
        (ii) Name two areas in Kenya which have a potential for producing geothermal power
        (d) Explain three measures taken by the Kenyan government to conserve energy

4. a) i) What is energy crisis
         ii) State four causes of energy crisis
         b) i) Name three non-renewable sources of energy
              ii) Apart from seven forks Dam project name two other hydro electric plants in Kenya
                  iii) Explain four factors that favoured the establishment of seven forks dam project
         c) State two effects of energy use on environment

5. (a) Give three advantages of using solar energy
   (b) Identify the hydro-power stations marked P, Q and R in the diagram

   (c) Explain any five ways in which energy contributes to the growth of the economy
   (d) (i) Explain any three problems associated with energy crisis
        (ii) Suggest any three ways to minimize energy wastage

6. (a) Define the term renewable sources of energy.
    (b) (i) Explain four physical factors influencing the generation of hydro-electric power.
(ii) Outline *three* limitations in the production of geothermal power in Kenya.
(c) (i) Explain any *four* negative effects of the energy crisis in the world.
   (ii) State *four* possible methods that the government of Kenya can use to conserve energy.

7. (a) Explain the impact of the oil crisis to Kenya
(b) What measures has the Kenyan government carried out to conserve energy

8. a) What is energy crisis?
   b) State *three* environmental impact of energy crisis in Kenya

9. (a) Name *two* sources of thermal electricity
   (b) Explain *four* benefits Kenya would get by striking oil in Isiolo
   (c) Explain *three* measures taken by the Kenya government to manage and conserve energy
   (d) Form *four* students of Nyabisawa Girls carried out a field study at Olkaria Geothermal pour stations

10. (i) State *three* preparation they made prior to the study
    (ii) State *three* methods of data collection they could have used
    (iii) State *three* uses of Geothermal energy they learnt

11. (a) (i) Name *two* non-renewable sources of energy
   (ii) Explain *four* physical factors that influence the location of hydroelectric power station
   (b) (i) What is energy crisis?
       (ii) State *three* causes of energy crisis
       (iii) Explain *two* effects of energy crisis

12. (a) List *two* renewable fossil fuels
    (b) Identify any *three* functions of hydro power reservoir other than power generation
    (c) State *three* reasons why Kenya spent so little on importing maize during the year 2002
    (d) (i) Name *two* provinces in Kenya where maize is grown on large scale
        (ii) State any *two* uses of maize

13. (a) Name the dams marked E, F and G
    (b) Differentiate between renewable and non-renewable sources of energy.
    (c) Explain *three* factors that influenced the location of Owen falls dam in Uganda
    (d) Explain *four* problems that hinder development of Hydro-electric power projects in Africa