#### **COMMUNITY HEALTH REVISION**

- 1. The following are the functions of the district health management team except
  - a) Supportive supervision of the health center teams
  - b) Coordinating inter-sectorial collaboration in health
  - c) Formulate national health policy
  - d) Participate in strengthening community participation in health
  - e) Development of district health plans
- 2. The following are members of the health center teams except:
  - a) Registration clinical officer
  - b) Enrolled community nurses
  - c) Public health technician
  - d) Statistical clerk
- 3. The following are management functions except
  - a) Planning
  - b) Organizing
  - c) Coordinating
  - d) Abdications
  - e) Delegation
- 4. The following are skills necessary for an effective health manager except
  - a) Human skills
  - b) Conceptual skills
  - c) Confrontational skills
  - d) Administrative skills
- 5. The following are the functions of the medical officer of Health except.
  - a) Strengthening preventive health care
  - b) Managing health care resources
  - c) Maintaining law and order
  - d) Providing support to health center teams
  - e) Participating in planning for health
- 6. In the management of health services the following are considered essential resources except
  - a) Human resources
  - b) Financial resources
  - c) Time
  - d) Factories for production of linen
  - e) Medical supplies
- 7. A health manager is expected to plan with the following in mind except
- a) Objectives
- b) Targets
- c) Activities
- d) Procrastination
- e) Resources

8. Which of the following statement is the current definition of health?

- a) Health is care for the terminally ill
- b) Health is treatment of injuries
- c) Health is a state of complete well being
- d) Health is absence of dangerous diseases
- e) Health is providing expensive machines to able people

9. The Bamako initiative encourages the following except

- a) Community self-reliance in health care
- b) Community contribution to health care
- c) Emphasis on mother and child health
- d) Emphasis on curative care
- e) Establishment of community funds for health care
- 10. The following are elements of primary Health care except
- a) Community health education
- b) Mother and child health
- c) Provision of flying doctor service
- d) Water and sanitation for health
- e) Immunization against infectious diseases
- 11. Primary Health care was defined at:
- a) Latira in the Riga Declaration
- b) Alma Ata conference
- c) The year of the child conference
- d) Health minister's meeting in Mali
- e) World health Assembly in 1945
- 12. The following are the characteristics of health care systems based on primary health care strategy except
  - a) Emphasis on prevention of disease
  - b) Inter-sectorial collaboration
  - c) Establishment of extensive care unity at the village level
  - d) Community involvement
  - e) Comprehensive health care
- 13. Which of the following statement is not true about primary Health care at the community level?
  - a) Community self-reliance
  - b) Community financing for Health
  - c) The chief directive's on Health
  - d) Individual involvement in health care
  - e) Community based rehabilitation
- 14. The Riga Declaration is concerned with the following except
  - a) Empowering the people
  - b) Reaffirming health for all
  - c) Establish highly specialized facilities in communities
  - d) Strengthening leadership for health in the health sector

- 15. The following are essential drugs for the Bamako initiative except
  - a) Chloroquine
  - b) Antihelmintics
  - c) Reserpine
  - d) Whitfield ointment
  - e) Acetylsalicyclic acid
- 16. A community health worker has the following responsibilities except
  - a) Referring patients to health centers where necessary
  - b) Providing first aid
  - c) Strengthening health education at the community level
  - d) Providing supporting traditional birth attendants
  - e) Managing high risk pregnancies
- 17. Which of the following cadre is not a member of the primary Health care core team at the district level?
  - a) Public health officer
  - b) Public health nurse
  - c) Sanitary engineer
  - d) Family health field educator
  - e) Nutrition fieldworker
- 18. Common diseases of childhood are mainly prevented by:
  - a) Traditional medicine
  - b) Drugs
  - c) First Aid
  - d) Immunization
  - e) Hospital based care
- 19. The following are factors contributing to maternal mortality and morbidity except:
  - a) Poor antenatal care
  - b) Limited access to qualified health care providers
  - c) Inadequate nutrition
  - d) Provision of competent maternity services
  - e) Low socio-economic status
- 20. Which of the following are high risk pregnancies? Except
  - a) Pregnancy in a 14 year old girl in standard 8
  - b) Pregnancy in a malnourished woman
  - c) Pregnancy in a woman suffering from tuberculosis
  - d) Pregnancy in a healthy 25 year old woman
  - e) Pregnancy in a woman with poor obstetric history
  - 21. The following are the contraceptives used in Kenya's Family Planning

#### Program except

- a) Low estrogen pills
- b) Intrauterine contraceptive devices
- c) Barrier methods
- d) Vaginal condoms

- 22. The following services should be provided at the services delivery Except
  - a) Antenatal care
  - b) Family planning
  - c) Immunization for children
  - d) Termination of pregnancy
  - e) Health education
- 23. The traditional birth attendant is expected to do the following except:
  - a) Identify at risk pregnancies
  - b) Provide counseling on family health issues
  - c) Refer complicated maternity cases to health center
  - d) Provide care for severe malnutrition in children
  - e) Strengthen liaison with health teams.
  - 24. The following staff is responsible for family health at the district level in the ministry of health.
    - a) Public health nurses
    - b) Nutrition field workers
    - c) Public health officers
    - d) district development officers
  - 25. The following immunizations are given at the service delivery point
    - a) Tetanus
    - b) Tuberculosis
    - c) Small pox
    - d) Whooping cough
    - e) Poliomyelitis
  - 26. The child survival and development programs provide for:
    - a) Oral dehydration
    - b) Adequate treatment of acute respiratory infections
    - c) Breastfeeding
    - d) Provision of health care for severe abnormalities
    - e) Female education.

#### 27. The safe motherhood initiative provides for the following except:

- a) Information and education on social antenatal care
- b) Appropriate maternity care
- c) Adequate nutrition
- d) Deploying obstetricians of traditional birth attendants
- e) Appropriate training of traditional birth attendants

#### 28. A health condition called metal fume fever is common among:

- a) Cement factory workers
- b) Tannery factory workers
- c) Plastic factory workers

#### d) Nickel factory workers

- e) None of the above
- 29. Worker activities which involve repetitive hand / fingers motion can result into:
  - a) Chronic fatigue syndrome
  - b) Carpal tunnel syndrome
  - c) Bipolar syndrome
  - d) Osteoporosis syndrome
  - e) Raynaud's phenomenon
- 30. Which of the following is not a chemical hazard?
  - a) Dander- Biologic hazard
  - b) Microwaves- Physical hazard
  - c) Silica
  - d) Parathion

31. Incidences of occupational health diseases and injuries are more common in developing countries than in developed

#### countries because:

- a) Industries lack material safety data sheet(MSD)
- b) Inadequate protective clothing and use of antiquated machinery
- c) There are many people working in confined spaces
- d) a + c
- e) a + b
- 32. In Kenya occupational workers at higher risks of occupational hazards include among others:
- a) Jua kali artisans
- b) Women hawkers
- c) Matatu drivers
- d) a+c
- e) All the above
- 33. Which of the following is not an ergonomic hazard?
- a) Fatigue
- b) Bipolar
- c) Vibration
- d) Carpal tunnel syndrome
- e) Monotony
- 34. Inert dusts are capable of:
- a) Causing metal fume fever condition
- b) Mechanically blocking the airways
- c) Causing cough
- d) Ulcers
- e) A+b

35. Which of the following group will you exclude from working in agrochemical industry?

- a) Migrant workers
- b) Smokers
- c) Women
- d) b+d
- e) All of the above
- 36. The importance of pre-medical examination is to:
- a) Establish the health condition of the individual
- b) Establish the professional fitness
- c) Establish whether one has chronic or acute diseases
- d) a+c
- e) All the above
- 37. The following is true of yellow fever except:
- a) Is an arbovirus infection
- b) Is transmitted by anopheles mosquitoes Aedes mosquito
- c) May be unapparent infection in certain monkeys
- d) May occur due to ecological changes
- e) Effective vaccine is available
- 38. The following is true of typhoid except:
- a) Food handlers are important in transmission
- b) Schistosoma may be important in acute transmission
- c) Chloramphenicol is the drug of choice
- d) Carriers are of great importance as sources of infection
- e) An effective vaccine is available
- 39. The following are true of amebiasis except:
- a) Characterized by bloody mucoid stool
- b) Cyst are the infective form
- c) Patients with acute amoebic colitis are infectious
- d) Trophozoites are found in the feaces of patients with amoebic dysentery
- e) Ordinary chlorination usually kills the cyst Super chlorination
- 40. The following are true about cholera except:
- a) An animal reservoir does not exist
- b) Vibrios invade the intestinal mucosa
- c) Rehydration is the mainstay of management
- d) Antibiotics are not useful in acute cases
- e) Vaccination has a crucial role to play in control
- 41. The following is true of schistosomiasis except:
  - a) S. haematobium frequently occurs within the same region as S. mansoni

- b) Eggs are responsible for most of the pathology
- c) Cercariae are the infective forms
- d) Haematuria may be important
- e) Water contact is important
- 42. The following are true of measles except:
- a) Man is the sole reservoir
- b) An effective vaccine is available
- c) One of the most contagious diseases
- d) Can precipitate malnutrition
- e) An effective drug is available for chemotherapy
- 43. The following is true of meningococcal meningitis except:
- a) Transmission is a droplet spread
- b) Second attacks are common
- c) Occurs whenever a high population density exists
- d) Sulphonamides protect against clinical diseases
- e) Effective vaccine is available
- 44. The following is true of stable malaria except;
- a) Young children are mainly affected
- b) Immunity is high
- c) Epidemics are rare
- d) Adults are not affected
- e) Transmitted by efficient vectors

#### 45. The following is true of sexually transmitted diseases except:

- a) Are on the decline
- b) Associated with promiscuity
- c) Youth are a risk group
- d) Contact tracing may be important
- e) Can be transmitted by ways other than sexual contact

46. Which one of the following sources of water can be expected to provide the safest drinking water?

- a) Unprotected spring
- b) Quickly running water
- c) Shallow hole
- d) Borehole
- e) Lake

47. What is the most adequate technique for a rural household to make the water that is fetched from the river safe for

drinking?

- a) Cooking the water
- b) Sedimentation

- c) High pressure filtration
- d) Chlorination
- e) Slow sand filtration

48. Which of the following is not a suspended impurity of water?

- a) Nitrate disolved
- b) Viruses
- c) Bacteria
- d) Algae
- e) Silt
- 49. What is the highest value of the Biochemical oxygen demand (BOD)
  - a) 330mg/e
  - b) 5mg/e
  - c) 100mg/e
  - d) 20mg/e
  - e) 60mg/e
- 50. Epidemiologic investigation can be conducted to:
  - a) Determine magnitude of disease in the population
  - b) To investigate outbreaks.
  - c) To identify high risk groups for diseases
  - d) (a) and (c) above
  - e) a, b, c above
- 51. Which of the following is not a measure of disease occurrence?
- a) Incidence rate
- b) Attack rate
- c) Sensitivity
- d) Point prevalence rate
- e) Period prevalence rate
- 52. Which of the following is not true of cohort studies?
  - a) Incidence rates can be determined
  - b) Are suitable for rare exposures
  - c) Generally are inexpensive
  - d) Take long time
  - e) Subjects are selected on the basis of exposure status
- 53. Which of the following is not true about case control studies?
  - a) The studies are selected on the exposure status
  - b) The subject are selected on the basis of outcome interest
  - c) They are generally inexpensive.
  - d) They are designed to test for an association between an exposure and an outcome of interest.
  - e) The controls are selected for the study.

54. The measures of association include the following except:

- a) Odds ratio
- b) Attribute risk
- c) Relative risk
- d) Prevalence
- 55. Which of the following is not a characteristic of a useful objective in healthcare delivery?
- a) It can be achieved despite the obstacles
- b) The result can be demonstrated.
- c) Require constant review by the manager
- d) Relates to the problem
- e) Include specification of time frame

56. Which action does not improve health care coverage in the community?

- a) Training more community health workers
- b) Promoting health education among local leaders
- c) Building more health facilities
- d) Reviewing the national organization structure
- e) Implementation of a structure referral system
- 57. Which among the following is not a rationale for introducing cost sharing in public health facilities?
  - a) Improve quality of healthcare
  - b) Regulate the consumption of health care
  - c) Reduce government expenditure on health
  - d) Increase community participation
  - 58. Which among the following is not a function of the district health management team?
  - a) Defines the health needs of the population
  - b) Collect and process relevant health information
  - c) Supervise all health workers in the district
  - d) Represent the community interest in the health planning process in the district
  - e) Monitor collections and expenditure of cost sharing funds
  - 59. The following statement is not true about attendance rate
  - a) Determines level of staffing
  - b) Determines drug supply
  - c) Dictates the health environment strategy
  - d) Determines fee collection strategy
  - e) An indication of disease prevalence
  - 60. Which of the following diseases is waterborne?
  - a) Malaria
  - b) Hookworm
  - c) Scabies
  - d) Hepatitis B
  - e) Hepatitis A
- 61. What is the main advantage of biological oxidation system over conventional sewage treatment plant?
  - a) The effluent is cleaner

- b) The affluent has low BOD
- c) Needs less space
- d) Easier to maintain
- e) Maturation ponds can be nearer to the town.

62. One of the following airborne contaminations may be described as a "chemical asphyxiant"

- a) Sulphur dioxide
- b) Phosgene
- c) Carbon monoxide and cyanide
- d) Ammonia
- e) Ozone
- 63. Water washed infections can be minimized by
- a) Prevention of contamination of water sources
- b) Prevention of contamination of water sources
- c) Improving water quality
- d) Providing 30 or more litres of water per household per day
- e) Increasing quantity of water to 100 liter per household per day
- 64. Majority of workers' deaths are attributed to exposure to
- a) Carbon monoxide
- b) Sulphur dioxide
- c) Lead oxide
- d) methane gas
- e) hydrogen sulphide gas

65. The following are common factors responsible for high infant mortality rate in developing countries except:

- a) Protein calorie malnutrition
- b) Ineffective immunization programs
- c) Insufficient MHC programs
- d) Early weaning
- e) long birth intervals

66. The activities in an under fives clinic in a rural health facility does not include.

- a) Immunization of infants
- b) Screening for heart disorders in under fives
- c) Weighing of sick under fives
- d) Treatment of sick under fives
- e) Nutritional advice for under fives

67. Which statement about family planning is untrue?

- a) Encourages long birth intervals
- b) Discourages large family sizes
- c) Encourages child bearing before age 18 years
- d) discourages child bearing after age 35 years
- e) has both health and an economic justification
- 68. Hospital delivery should be recommended for:

- a) A second normal delivery
- b) A pregnancy before 42 weeks
- c) More than four pregnancies
- d) A mother with a height of 160 cm
- e) Labour occurring at 40 weeks gestation

69. The child mortality rate in Kenya currently is: 14%

- a) 69%
- b) 74%
- c) 74 per 1000
- d) 112 per 100
- e) 590 per 100,000

70. Deaths 29-365 days x1000 total births in a year are:

- a) the above ratio is known as
- b) crude death rate
- c) infant mortality rate
- d) age specific death rate
- e) post neonatal rate

71. Which of the following statements about demographic transition theory is correct?

- a) Fertility decline brought about a decline in infant and child mortality
- b) The maximum rate of population growth never exceeds 1.5 % per annum in countries
- c) Mortality declined before fertility
- d) Fertility declined before mortality.
- e) Mortality declined primarily due to improved personal hygiene and health care.
- 72. The balance between crude birth rate and crude death rate without \*\*\*\* taking into account migration is referred to as :-
- a) Net migration
- b) Crude rate of natural increase
- c) General fertility rate
- d) Total fertility rate
- 73. Gross reproduction rate between 1989 and 1999 Kenya's population increased by? TFR = 1989 (6.7) 1999 (5)
- a) 10.2 %
- b) 25.1 %
- c) 34.1 %
- d) 38.9 %
- e) 49.5 %
- 74. Rural to rural migrant it's in Kenya are mostly:
- a) Young single persons aged 18-25 years with high school education and above urban
- b) Married persons aged around 30 years with little or no formal education peaks between age 20-25
- c) Married persons aged over 50 years with little or no formal education
- d) Married persons aged 18-20 years with little or no formal education rapid rise in teens and early twenties
- e) Married persons aged 70 years with little or no formal education

75. In between 1989 and 1999, Kenya's population increased by

- a) 10%
- b) 20%
- c) 25%
- d) 34% (28.7-21.4)/21.4\*100
- e) 44%

76. An agrarian population in comparison to a modern, post transitional will have all the following except:

- a) A younger population
- b) A larger dependency ratio
- c) A larger proportion of children surviving to adulthood
- d) A lower life expectancy
- e) A smaller average number of children surviving to adulthood
- 79. Deaths in year to people aged X X 1000

People aged X at mid-year

The above rate /ratio is known as:

- a) Crude death rate
- b) Age specific death rate
- c) Infant mortality rate
- d) Under five mortality rate
- e) Cause specific death rate
- 80. Endemic means that a disease
  - a) Occurs clearly in excess of normal expectancy Epidemic
  - b) Is habitually present in humans' populations
  - c) Affects a large number of countries simultaneously
  - d) Exhibits a seasonal pattern
  - 81. The purpose of a double-blind study is to:
    - a) Achieve compatibility of treated and untreated patients
    - b) Reduce the effects of sampling variation
    - c) Avoid observer and bias and sampling variation
    - d) Avoid subject bias and sampling variation
    - 82. Which of the following is not an advantage of a prospective cohort study?
    - a) It can usually be done more rapidly than a case control study
    - b) Precise measurement of exposure is possible
    - c) Incidence rates can be calculated
    - d) Recall bias is minimized compared to a case control study
    - e) Many diseases outcomes can be studied simultaneously

83. A study was designed to determine if cigarette smoking is associated with lung cancer. 2 groups consisting of

200 subjects each were interviewed about their past exposure to cigarette smoking. The first group consisted of subject which had not developed lung cancer. This study was a (n):

- a) Case-control study
- b) Prospective cohort study
- c) Experimental study
- d) Comprehensive study
- e) Cross-sectional study

84. The purpose for which epidemiological investigation is carried out is to:

a) Provide data necessary for planning of health care services

- b) Identify determinants of diseases
- c) Evaluate preventive and control programs
- d) (a),(b) and (c) above

85. Determinant in pregnancy is influenced by all the following except:

- a) The length of time a particular nutrient lacks
- b) Stage of gestation at which the deficiency occurs
- c) The intake of substances such as caffeine, alcohol and nicotine
- d) Absence of intrauterine infections
- e) Age of the mother

86. Maternal nutrition is influenced by all except one:

- a) Environmental conditions
- b) Social economic factors
- c) Genetic factors
- d) Infections
- e) Intake of adequate nutrition
- 87. One of the statements is correct about infant's iron
- a) Iron in infants is stored in the liver to last for about 6 months
- b) Iron in infants is stored in the liver to last for about 7 months
- c) Stored in the liver to last for about to last for about 8 months
- d) Stored in the liver to last for about to last for about 3-4 months
- e) Stored in the liver to last for about to last for about 5-6 months

88. Normal blood sugar level in the body is maintained by:-

- a) Hormones produced by the thyroid gland
- b) Hormones produced by the kidney
- c) Continuous intake of glucose
- d) Insulin produced by the liver
- e) Insulin and glucagon produced by the pancreas

89. The vicious cycle of malnutrition is due to all the following except:-

- a) Child growth failure
- b) Low birth weight babies
- c) Teenage pregnancies
- d) High weight and low height in teenagers
- e) Small adult women

#### 90. The world health organization definition of health was accepted by the international community in (Tick only

one):

- a) 1935
- b) 1948
- c) 1957
- d) 1947
- e) 1968
- 111. School health is all the following except:
  - a) An investment

- b) Facilitation of growth and development
- c) Facilitation of peer pressure
- d) A Way to reach the parents
- 112. Concept of patient's rights includes all the following except:
  - a) Information about his /her disease
  - b) Signing consent for surgery
  - c) Refusal to have valid treatment
  - d) Self-neglect
  - e) Informed consent for surgery/procedures
- 113. Characteristics of chronic illness are all the following except:
  - a) Slow insidious on set
  - b) Long duration
  - c) Require care in an intensive care unit
  - d) Disabling
  - e) Continued care
- 15. Health education should be carried out by all the following except:
  - a) Peers
  - b) Parents
  - c) Mr. Know it all
  - d) Teachers in primary schools

116. Communicating for health is all the following except:

- a) Removing barriers to good sleeping habits
- b) Demanding good eating habits for the under fives
- c) Explain treatment regimen for malaria
- d) Educating a diabetic on how to maintain sterility for the needles and syringes he/she uses
- e) Using standard information seminars to sensitize men

117. A woman comes to the examination with a cough and a diagnosis of pneumonia is made. She should be educated

- about the following except:
  - a) Ventilation
  - b) nutrition
  - c) care of breasts
  - d) maintaining appropriate clothing
  - e) taking medication according to the prescription
- 118. Increasing the supply of water to households would greatly reduce the incidence of:
  - a) ware-based diseases
  - b) water-dispensed diseases
  - c) water washed diseases
  - d) water-related diseases

e) water-borne diseases

119. Chlorine residue during water treatment is described to:

- a) strengthen peoples teeth and bones
- b) clarify water as it is distributed
- c) to protect water from being contaminated
- d) enhance decomposition of organic matter
- e) protect water pipes from corrosion

120. Improper refuse disposal is associated with all the following except:

- a) water contamination
- b) respiration diseases
- c) blockage of sewers
- d) ozone depletion
- e) breeding of disease vectors

121. Which of the following is the most important factors in protection of workers against occupational health hazards in Kenya's industries?

- a) Periodic medical examinations
- b) Occupational health education of workers and the management
- c) Exhaust ventilation of the working environment
- d) Guarding all dangerous machines
- e) Providing adequate protective clothing
- 122. The proportion of currently married women using a family planning method in Kenya is 58%
- a) 93%
- b) 33%
- c) 39%
- d) 74%
- e) 59%

123. The key health cadre of running MCH clinics is:

- a) registered clinical officers
- b) community nurses
- c) nutrition
- d) family health field educators
- e) public health technicians

124. The maternal mortality rate in Kenya is:

- a) 365 per 100,000 live births
- b) 590 per 100,000 live births
- c) 112 per 1000 live births
- d) 74 per 1000 live births
- e) 60 per 1000 live births
- 125. The last vaccine in the routine EPI schedule is:
  - a) Hepatitis B
  - b) Haemophilus influenza

- c) Measles
- d) DPT
- e) Polio

126. Which of the following MCH records is not routinely available in health center?

- a) Monthly activity report
- b) EPI reports
- c) Contraceptive logistic reports
- d) CHANIS
- e) Post-partum complication report

#### 127. Steps in planning involve the following activities:

- I. Establishment of objective
- II.Assessment of resources

III.Analysis of health situation

- IV.Prepare alternative plans
- V.Select one alternative

Which is the correct sequence?

- a) 1,11,111,1V,V
- b) 11,1,111,1V,V
- c) 111,1,11,1V,V
- d) 111,11,1V,1,V
- e) 11,1,1V,111,V

128. To match the limited resources to accomplish a defined objective by eliminating wasteful expenditure in the shortest possible time. This can be definition of:

- a) Management
- b) Evaluation
- c) Planning
- d) Organization
- e) Monitoring

129. Which of the following is not a description of a good objective?

- a) Specific
- b) Attainable
- c) Relevant
- d) Cheap
- e) Time limit

130. Which among the following factors is not considered when addressing the health problem in a

community?

- a) Whether these problems can be solved
- b) Whether there are adequate funds for implementation of the planned activities
- c) Acceptance of the proposed strategies by the population
- d) Accurate definition of the problem
- e) Availability of professional qualified staff.

- 131. Equity in health care means
  - a) Stated objectives are achieved according to the plan
  - b) Stated objectives are achieved using minimal of resources
  - c) All those requiring services have been provided in health care
  - d) Sick patient seek treatment from facilities they can be able to pay

133. The median is a better measure of central tendency when:

- a) the distribution is normal
- b) the number of observational is very large
- c) its not necessary to perform significance tests
- d) the distribution is markedly skewed
- e) none of the above
- 134. All the following are true of a universe with Gaussian distribution, except:
  - a) the values extend from xx to + xx
  - b) the distribution is symmetric about the universe mean
  - c) the distribution is bell –shaped
  - d) the proportion of the area under the curve from- xx to the mean is 50%
  - e) all the above are true

135. Quantities that are measured and calculated from samples are known as:

- a) Parameters
- b) Statistics
- c) Distribution
- d) Sampling variation
- e) None of the above

136. The following are heights (in cm) were recorded for 13 students attending instructions for nutritional

assessments:

156,162,157,149,162,156,148,162,160,170,156,168,156

The median height for this group was:

- a) 157 cm
- b) 159.9 cm
- c) 156.5 cm
- d) 158.5 cm
- e) Impossible to tell

137. One of the following is not important in a communicable disease process

- a) Agent
- b) Vector
- c) Reservoir
- d) Intermediate host
- e) Eradication

138. Transmission of communicable disease is

- a) Crucial for the development of disease
- b) Always follow entry of agent into host
- c) Related to existence of a carrier
- d) Direct via intermediate host
- e) In directive via a vehicle
- 139. Transmission of malaria is
- a) Water-borne
- b) Water based
- c) Water related
- d) Water washed
- e) Water cleared

140. Current use of impregnated nets for prevention of malaria is all of the following except:

- a) Effective
- b) Efficacious
- c) Sustainable
- d) Appropriate
- e) Acceptable
- 141. Transmission of schistosomiasis is
  - a) Water-based
  - b) Water-borne
  - c) Water-washed
  - d) Water-related
  - e) Water-cleared

143. Which of the following statement is not true about primary Health care at the community level?

- a) Community self-reliance
- b) Community financing for health
- c) The chief's directives on health
- d) Individual involvement in health care
- e) Community based rehabilitation

144. Between 1989 and 1999, Kenya's population increased by:

- a) 10%
- b) 20%
- c) 25%
- d) 34%
- e) 44%

146. Which of the following gives the correct Crude Birth Rate (CBR) AND Crude Death Rate (CDR) as per 1999 population and housing census results for Kenya?

<u>CBR1000/ YR</u>	<u>CDR1000/yr</u>
74	25
62	20
52	18
40	11
30	8

According to 1999 population and housing census results Kenya's population was growing at an average of:

- a) 1% per annum
- b) 2% per annum
- c) 2.9% per annum
- d) 3.4% per annum
- e) 3.9% per annum

 $\frac{147. \text{ Death in Year to people aged } X \text{ x 10000}}{\text{People aged X at mid -year}}$ 

The above rate /ratio are known as:

- a) Crude death rate
- b) Age specific death rate
- c) Infant mortality rate
- d) Under five mortality rate
- e) Cause specific death rate
- 149. The purpose of a double –blind study is to:
  - a) Achieve comparatibility of treated and untreated patients
  - b) Reduce the effects of sampling variation
  - c) Avoid observer and subject bias
  - d) Avoid observer bias and sampling variation
  - e) Avoid subject bias and sampling variation

150. Which of the following is not an advantage of a prospective cohort study?

- a) It can usually be done more rapidly than a case-control study
- b) Precise measurement of exposure is possible
- c) Incidence rates can be calculated
- d) Recall bias is minimized compared to a case -control study
- e) Many disease outcomes can be studied simultaneously

151. A study was designed to determine if cigarette smoking is associated with lung cancer. Two groups consisting of

200 subjects each were interviewed about their past exposure to smoking. The first group consisted of subjects who had

developed lung cancer and the second group consisted of subjects who had not developed lung-cancer. This study was

a (n):

- a) Case-control study
- b) Prospective cohort study
- c) Experimental study
- d) Comprehensive study
- e) Cross-sectional study
- 152. The purpose for which epidemiological investigation is carried out is to:
- a) Provide data necessary for planning of health care service
- b) Identify determinants of disease
- c) Evaluate preventive and control programs
- d) (a), (b) and (c) above
- 153. Under nutrition in pregnancy is influenced by all the following except:
- a) The length of time a particular nutrient lacks
- b) Stage of gestation at which the deficiency occurs
- c) The intake of substances such as caffeine, alcohol and nicotine
- d) Absence of intrauterine infections
- e) Age of mother
- 154. Maternal nutrition is influenced by all except one:
- a) Environmental conditions
- b) Social economic factors
- c) Genetic factors
- d) Infections
- e) Intake of adequate nutrition
- 155. One of the statements is correct about infant's iron:
- a) iron in infants is stored in the liver to last for about 6 months
- b) iron in infants is stored in the liver to last for about 7 months
- c) stored in the liver to last for about to last for about 8 months
- d) stored in the liver to last for about to last for about 3-4 months
- e) stored in the liver to last for about to last for about 5-6 month
- 156. Normal blood sugar level in the body is maintained by:-
- a) hormones produced by the thyroid gland
- b) hormones produced by the kidney
- c) continuous intake of glucose
- d) insulin produced by the liver
- e) insulin and glucagon produced by the pancreas
- 157. The various cycle of malnutrition is due to all the following except:
  - a) child growth failure
  - b) low birth weight babies
  - c) teenage pregnancies
  - d) high weight and low height in teenagers
  - e) small adult women

158. The world health organization definition of health was accepted by the international community in (Tick only one):

- a) 1935
- b) 1948
- c) 1957
- d) 1947
- e) 1968

159. Health education has the following elements except:

- a) it is a process
- b) it can be one time
- c) it can be now and again
- d) it must be one time
- e) it can go for life
- 160. School health is all the following except:
  - a) An investment
  - b) Facilitation of growth and development
  - c) Facilitation of peer pressure
  - d) A way to reach the parents

162. Characteristics of chronic illness are all the following except:

- a) Slow insidious on set
- b) Long duration
- c) Require care in an intensive care unit
- d) Disabling
- e) Continued care
- 163. In order to have a successful patient education, consider the following except:
  - a) Culture
  - b) Religion
  - c) Height
  - d) Socio economic status
  - e) Psychological status

166. A woman comes to the examination with a cough and a diagnosis of pneumonia is made. She should be educated about the following except:

- a) Ventilation
- b) nutrition
- c) care of breasts
- d) maintaining appropriate clothing
- e) taking medication according to the prescription

181. In a normally distributed population, the proportion of observation that lie with  $\pm 2$  standards from the mean is approximately:

- a) 95%
- b) 25%
- c) 68%
- d) 75%
- e) impossible to tell

193. The main components of the cost of a disease to the society are:

- a) Cost of treatment of cases, productive time lost during sickness, loss of productivity due to mortality, and cost of diseases control
- b) Increase in MOH budget and hiring of more disease control personnel
- c) Building more health facilities and the treatment of those affected by the disease
- d) All the money that is p-aid by the social health insurance for those suffering from the disease
- e) Cost of medicine, cost of training and hiring more doctors and other disease control staff
- 194. The concept of scarcity forms the basis of economics because:
  - a) It conforms to public policy
  - b) Markets are always there
  - c) It is natural
  - d) Factors of production are expensive
  - e) There are always more needs than resources to satisfy them
- 195. The totality of the health sector contribution to GDP includes:
  - a) Treatment and cure of patients
  - b) Training of nurses and doctors
  - c) All the medical commodities and medicines that are produced
  - d) Collaboration with other sectors
  - e) Health care disease control, education and research

196. Social medicine can best be described as:

- a) Teaching doctors to socialize
- b) Traditional medicine
- c) Being social in medical practice
- d) Socio-economic of a community
- e) Looking into the socio-cultural components of health and diseases

197. Socio-economic development programs in developing countries:

- a) Are always accompanied by improvements in health status
- b) Can lead to deterioration in health status
- c) Always achieve their goals
- d) Never achieve their goals
- 198. Food consumption is not wholly based on what is available in the environment because:
  - a) Fear of food poisoning
  - b) Ignorance
  - c) Acculturation

- d) Cultural edibility
- e) Cultural adaptation

199. The following are the characteristics of healthcare systems based on primary strategy except:

- a) emphasis on prevention of disease 3
- b) inter-sectorial collaboration
- c) community involvement
- d) comprehensive healthcare
- e) establishment of intensive unit at the village level

200. Which of the following statements regarding assessment of nutritional status is false?

- a) The waterloo classification is used in many community diagnosis of nutritional status
- b) Mid upper arm circumference is age independent from 12-60 months
- c) Underweight is a good indicator for growth monitoring among children aged less than five years
- d) Percent of the median of reference population is the most widely used method of reporting nutritional status of communities
- e) Weight for height is a measure of thinness

201. A basic cause of malnutrition in Sub-Saharan Africa is:

- a) Inadequate food intake
- b) Poverty
- c) Low level of maternal care practices
- d) Diseases

202. In assessment of PEM the nutritional status indicator typically with the highest prevalence in national nutritional

surveys is:

- a) Wasting
- b) Underweight
- c) BMI among men < 50 years
- d) Stunting
- e) MUAC wasting

203. The nationals Vitamin A supplementation schedule targets all the following except:

- a) Adolescents
- b) Women in the reproductive age bracket
- c) Pregnant women
- d) Children 48 months
- e) lactating women

204. the most widespread feeding malpractices among Kenyan mothers today is:

- a) Late initiation of breastfeeding
- b) Early cessation of breastfeeding
- c) low rates of breastfeeding
- d) Routines separation of mother and their infants post-natally
- e) Adhere to the ten steps to successful breastfeeding and the guidelines on implementation of the breastfeeding policy

205. In line with the goal of making maternal and child health services available the MCH program aims to:

- a) Increase access to within one kilometer
- b) substitute static health facilities with mobile and community based services
- c) Reduce waiting time to within 30 minutes
- d) Deploy doctors to health centers.
- e) Train mothers on social and cultural taboos

206. The demographic rationale for emphasis on MCH services in Kenya is that

- a) The population pyramids for Kenya is different from that of the rest of the world
- b) The youth make up 50% of the population
- c) The total fertility rate in Kenya is high and growing
- d) Females in the reproductive and under-fives make up to 40 % of the population
- e) Women and children are a marginalized population in African societies
- 207. Child mortality rates:
  - a) The mortality rate for children below the age of 15 years
  - b) The difference between under five mortality and infant mortality rate
  - c) 74% per 1000 in Kenya up from 60 per a thousand in the late KDHS
  - d) the ratio of maternal mortality rate to infant mortality rate
  - e) determined because fatality rates of vaccine preventable diseases

208. The pillars of the motherhood include all the following except:

- a) essential obstetric care
- b) antenatal care
- c) family planning
- d) clean delivery
- e) none of the above

209. Which of the following is not an intermediate determinant of child health?

- a) Constitution \*\*\*\*
- b) Malnutrition
- c) Exposure
- d) Susceptibility
- e) Health care

210. Which of the following is the most appropriate in presenting fasting blood sugar level of observation in a sample

of obese men?

- a) The pie chart
- b) The bar chart
- c) the frequency polygon
- 211. Which of the following situation is not ideal for construction of a 99% confidence interval?
  - a) the MBChB IV students at the university of Nairobi this year
  - b) the proportion of male nurses in the Ministry of health
  - c) stunting in nomadic populations
  - d) the difference between KNH and Pumwani Maternity birth wrights
  - e) all the above are appropriate

212. The type of data that indicates the presence or absence of a disease condition is referred to as:

- a) binary
- b) interval
- c) ratio
- d) continuous
- e) ordinal

213. The median may be more appropriate in presentation of data is:

- a) the distribution is normal
- b) the number of observation is very large
- c) the mean is close to the median
- d) the distribution is markedly skewed
- e) None of the above.
- - a) The population variance is unknown and has to be estimated from the sample
  - b) The hypothesis concerns two potential proportions The population variance is known
  - c) The sample size is large enough
  - d) The distribution of population deviates from normality
- 215. A community health seeking behavior may be determined by the following except which one?

#### ALL OF THE ABOVE

# a) The distance between home and facility

- b) The behavior of the health provider towards the patient
- c) The nature, severity and prognosis of the disease in question
- d) Socio cultural and physical access issues
- e) Availability of drugs and dressing

216. One of the following is a major key to successful community based health programs:

- a) Cost effectiveness
- b) Community involvement and ownership
- c) Qualifications of the care provider
- d) It meets all the health needs of the poor
- e) It is gender sensitive and involves women

217. The maternal mortality ratio may be defined as the total number of maternal death ascribed no pregnancy and

puerperal causes occurring in one year multiplied by a factor and divided by:

- a) The mid-year population of women aged 15-49 years
- b) The mid-year population
- c) The total number of deaths from all causes in that year
- d) The total number of live births in a year
- e) The mid-year population of all women in the population
- 218. The percentage of Kenya's population between 15 and 64 years as per 1999 census results

<u>All births in as year x 1000</u> Total population of married women 15-49 years in a year The above rate/ratio is known as:

a) Age specific death rate

- b) Cohort fertility rate
- c) General marital fertility rate
- d) Crude Birth rate
- e) General fertility rate

219. Which one of the following statements about macro- theory of migration is incorrect?

- a) The focus is on patterns and trends in migration
- b) Useful in distinguishing characteristics of migrants
- c) Focuses on information processing and decision -making process of potential migrants
- d) Typically have population aggregates as the unit of analysis
- e) Useful in providing an understanding of migration as an aspect of demographic change
- 220. Control of health hazard at a wok place may be achieved by all of the following except:
  - a) Appropriate engineering
  - b) Good house keeping
  - c) Use of protective clothing
  - d) Reduction of exposure duration
  - e) Non-surveillance of the risk factors

221. Workers whose task is taking responsibility of other people lives and well-being commonly suffer from:

- a) Ulcers
- b) Lead poisoning
- c) Accidents
- d) Lung diseases
- e) Heat strokes
- 222. All the following are factors that influence intensity of toxicity except:
  - a) Route of exposure
  - b) Age
  - c) Basal aerobic
  - d) Previous exposures
  - e) Health status

223. Non-psychological effects of noise to human being are:

- a) In sound
- b) waste management more attention should be on:
- c) Transportation
- d) Collection
- e) Generation minimization
- f) Separation at source
- 224. All the following are disadvantages associated with a sanitary landfill except:
  - a) Subsidence
  - b) Air pollution
  - c) Fires
  - d) Contamination of ground water
  - e) Large area of land

225. Which of the following is <u>NOT</u> an appropriate strategy in maintaining motor vehicular air pollution in the city of Nairobi?

- a) Use of sulphur free fuels
- b) Use of leaded gasoline
- c) Encourage non-motorized transport
- d) Reduction of motor vehicle per capita
- e) Enforcing environmental legislation

226. Which one of the following is not a potential adverse effect of global warming:

- a) Increased cyclones
- b) Increase in sea level and washing away of coastal properties
- c) Increase in malarial infections
- d) Increase in pesticides
- e) Increase in skin
- f) Ulcers infections are likely to be higher among :

227. In a cohort study:

- a) The groups are of the same size
- b) The subjects are randomly assigned to the group
- c) The subjects are selected on the basis of the outcome disease status
- d) There is no control group
- e) The subjects are selected on the basis of the exposure status

#### 228. The odds ratio:

- a) Is a measure of incidence
- b) Is a measure of reliability of a screening
- c) Is a measure of the strength of association between n a factor and a disease
- d) Is the ratio of the incidence rate in the exposed group to that in the un exposed group
- e) Is a measure of a validity of a screening
- 229. Which of the following is/are the activity (xx) of epidemiology?
  - a) Describing the natural history of a disease
  - b) Identifying the cause of disease in the population
  - c) (a), (b) and (c) above
- 230. Which of the following is a case -control study?
  - a) Study of past morbidity trends to permit estimates of the occurrences of disease in he future
  - b) Analysis of previous research in different places to permit establishment of hypothesis
  - c) Obtaining histories and other information from a group of known cases and a comparison group to determine the frequency of a characteristic or exposure under study
  - d) Study of the incidence of cancer in men who have quit smoking
  - e) Both x) and x) above
- 231. Biological transmission of communicable diseases refers to:
  - a) Vector breeding
  - b) Vector feeding
  - c) Vector resting
  - d) Asexual multiplication of vector

- e) Essential part of agent
- 233. Measures in prevention and control of diarrhea disease do not include:
  - a) Hand washing
  - b) Food and water hygiene
  - c) Suppression of flies
  - d) Suppression of cockroaches
  - e) Environmental sanitation
- 234. Measures in prevention and control of helminthic infections least involves one of the following:
  - a) Mass chemotherapy
  - b) Wearing of shoes
  - c) Health education
  - d) Personal hygiene
  - e) Suppression of flies

235. One of those measures is least useful in control of zoonotic disease

- a) Vector control
- b) Rodent control
- c) Vaccination
- d) Isolation
- e) Quarantine

236. A statement of the minimum acceptable qualification that an incumbent must possess to perform a given job successfully is most accurately as a:

- a) Job description
- b) Job analysis
- c) Job specification
- d) Human resourced plan
- e) Job advertisement

237. A supplies system for the district health system deals with the following except:

- a) Requisition
- b) Purchasing
- c) Analyzing of obstacles
- d) Issuing of orders
- e) Receipt

238. Leadership can------ subordinates to help the organization achieve its goals:

- a) Motivate
- b) Influence
- c) Direct
- d) Communicate
- e) All of the above
- 239. The following about school health is correct except:
  - a) It reaches everybody
  - b) It reaches the parents

- c) It reaches those within the specific geographical area
- d) It reaches parents' teachers' association members
- e) It reaches the school heads
- 240. All listed below are correct about health education except:
  - a) Use of appropriate values
  - b) Use of persuasive languages
  - c) People understand health managers better when there is threat of death
  - d) When they can handle the visual
  - e) When seeing feeling and hearing at the same time
- 241. Health education is all of the following except:
  - a) Guiding
  - b) Informing
  - c) Commanding
  - d) Directing
  - e) Building on previous knowledge
- 242. Communication for health means none of the following except:
  - a) Waving legal documents at the community to let them to dig toilets
  - b) Listening to a diabetic individual about his problems
  - c) Giving top down lecture on breast –feeding to rural women
  - d) Ordering a youth group to stop having sex because they can get HIV and die of AIDS
  - e) Taking putative action against children refusing to sleep under mosquito nets
- 243. The effectiveness of a public health program is best defined as One of the following:
  - a) The number of people protected by the program
  - b) Ted number of people cured by the program
  - c) The reduced cost in resources of attaining the objectives
  - d) The extent to which pre-established objectives are attained
  - e) The effect the program has in lowering the infant mortality Rate (I.M.R).
- 245. Controlling function of management implies one of the following:
  - a) Ability of the manager to direct every activity of his subordinates
  - b) Unity of command
  - c) Ensuring that the objective of the organization are being achieved
  - d) Subordination of individual interest to those of the organization
  - e) None of the above
- 246. One of the following is NOT an essential requirement of effective communication in management:
  - a) The message must convey the meaning intended by the transmitter
  - b) Communication barriers must be minimized
  - c) The message must in writing
  - d) The receiver must be influenced by the message
  - e) The receiver should behave in conformity with the message
- 247. In any given societies death is seen as:
  - a) The end of everything
  - b) A rite of passage

- c) A result of witchcraft
- d) Inevitable
- 248. The difference between disease and illness is that:
  - a) One is through infection and the other through witchcraft
  - b) One present in the body and the other in the mind
  - c) One has some organic background
  - d) None of the above
- 249. Traditional health care is mainly useful to:
  - a) People who are too far from modern health services
  - b) Cases of witchcraft and sorcery
  - c) Community's concept of causation and management of illness and diseases
  - d) To illiterate and elderly members of the community
- 250. Which of the following is false for Endemic Goiter?
  - a) Is a cause of mental retardation in children
  - b) Prevalence is best determined by examining school children
  - c) The main source of iodine is water
  - d) Is common in females
  - e) Is geographically uniformly distributed
- 251. The following are true for vitamin A except:
  - a) Is derived only from foods of animal origin
  - b) Is necessary for adequate growth
  - c) Deficiency can be controlled by mass dosing of oral preparation of the vitamin
  - d) Severe deficiency is associated with high mortality
- 252. The following are good primary indicators of community nutritional status except:
  - a) Gross natural product per capital
  - b) 1-4 year mortality
  - c) prematurity rate
  - d) infant mortality rate
  - e) population /doctor ratio
- 253. Which of the following statement about the theory of demographic transition is false?
  - a) Fertility decline brought about a decline in infant and child mortality
  - b) Mortality declined before mortality
  - c) Once the transition was underway annual growth rates declined steadily
  - d) Mortality declined primarily due to improved personal hygiene and health care
  - e) Fertility declined before mortality
- 254. According to 2003 Kenya Demographic and Health Survey the peak of child bearing for urban women was:
  - a) 40-45 years age –group
  - b) 35-39 years of age- group
  - c) 25-29 years of age group

- d) 20-24 years of age group
- e) 15-19 years of age group

255. One of the following is a milk secreting hormone

- a) oxytocin
- b) prolactin
- c) thyroid
- d) pituitary gland
- e) let down hormone

#### 256. The oxytocin reflex is enhanced by the following factors

- a) worry
- b) stress
- c) pain
- d) doubt
- e) sound or sight of a baby

257. Mother to child transmission is influenced by the following factors

- a) recent infection with HIV
- b) severity of HIV infection
- c) infection with sexually transmitted diseases
- d) duration of breastfeeding
- e) All the above
- 258. Three rich sources of vitamin A are:
  - a) carrots, dark green vegetables, red palm
  - b) fat, liver, groundnuts
  - c) cabbage, kidney, carrots
  - d) Fresh milk, breast milk, bananas
  - e) colostrums, spinach, maize

259. Mr. A. Otieno the clinical officer in charge Mt Marabou Health centre noticed that his easy going supervisory style has given his supervisor that senses that they come and go as they please. He is getting pressure from management to tighten up to comings and goings of the employees. What type of guide action should he establish about hours of work?

- a) Guide
- b) rule
- c) program
- d) policy
- e) supervisory checklist

260. The last step in the planning process is what?

- a) Note alternatives
- b) Choose and implement
- c) Create a plan
- d) Evaluate alternatives
- e) Reviewing obstacles

261. What broadly outlines the organization purpose and series to communicate who the organization is, what it does and where it is headed?

- a) Human relation
- b) Specific objective
- c) Budget statement
- d) Mission statement
- e) Vision statement

262. Community based Health Care is usually all the above except which one?

- a) Community initiated and supported
- b) Sustainable through community finances
- c) A majority of the resources persons are expected to be females
- d) Management is answerable to the local hospital
- e) Gender sensitive in leadership positions

263. Maternal health services and infant growth monitoring in the area you visited for your field program could be hampered by all the following except which one? ALL ARE TRUE

- a) Long distance to the health facility
- b) Frequent drought and poverty
- c) Traditional beliefs against modern health services
- d) Poor interactions with care giver
- e) Illiteracy and unawareness among the mothers

264. One of the following is not among the original elements of PHC

- a) Provision of aspirins and other essential drugs
- b) Expanded child immunization programs
- c) Management of STI and HIV/AIDS
- d) Ensuring availability of clean water
- e) Referrals to the local health centers

265. One of the following is not a major contributor to failure of community based health initiatives

- a) Absence of well qualified medical personnel
- b) Corruption in leadership interference by politicians
- c) Lip services on intersectional collaboration
- d) Absence of essential drugs

266. Traditional birth attendants are often recognized as an important resource in PHC personnel in one of the following areas.

- a) Specialized health providers
- b) Community health workers
- c) Referrals initiators
- d) Bamako initiative managers

267. Opinion leaders a plant that shows how top management plans are to be carried out at the departmental short term level is called what?

- a) Tactical
- b) Operational
- c) Policy
- d) Strategic
- e) Budget

268. All of the following diseases are water washed except

- a) Typhus
- b) Scabies
- c) Trachoma
- d) Bacillus dysentery
- e) Schistosomiasis

269. Water borne sewerage systems is inappropriate for most high density (slum) areas in Kenya because of all the

following except

- a) Very expensive
- b) High water consumption
- c) Blockage
- d) Labor
- e) Schistosomiasis

270. Which of the following methods should NOT be used in controlling fly nuisance in ordinary pit latrine?

- a) Burning hay or straw inside the pit
- b) Use of insecticides
- c) Pouring of boiling water on the surface of the latrine
- d) Allowing lizards to live inside the pit latrines
- 272. STDs can be prevented by all the following except
  - a) Abstinence
  - b) Prompt treatment of STDs
  - c) Having one sexual partner always
  - d) Non penetrative sex
  - e) Treatment of secondary syphilis

273. The prevalence of a disease in a given community may be increased by the following factors except

- a) Reduction in incidence
- b) In-migration of susceptible individuals
- c) Increase in duration of disease
- d) Out migration of susceptible individuals
- e) Increase in duration of diseases
- f) Improvement in diagnosis facilities
- 274. Which of the following statement of infant mortality rate is incorrect?
  - a) It is the number of infant deaths per thousand of live births

- b) Covers all childhood deaths
- c) Represents he probability that a child will live to celebrate the first birthday
- d) Stands at 78 per 1000 in Kenya 39
- e) Has wide regional disparities
- 275. The proportion of currently married women using a Family Planning Method in Kenya is:
  - a) 5 %
  - b) 20 %
  - c) 33 %
  - d) 38 %
  - e) 60 % -63%

276. Infants are the most vulnerable members of the society due to the following except

- a) total dependence on care givers
- b) high levels of maternal antibodies
- c) high growth rate
- d) high nutritional demands
- 277. Lower immunity to disease between 1998 and 2003 total fertility rate for Kenya has:
  - a) stagnated to the same level as that of 1998
  - b) increased slightly relative to 1998 rate
  - c) increased rapidly compared to 1998 rate increased rapidly compared to 1998 rate
  - d) decreased significantly compared to 1998 rate

278. If in a model time table for a country X, the proportion of infants surviving between birth and exact age 1 is 8115 how many infants will die before age 1 out of 100,000 babies born at the same time

- a) 8118 infants
- b) 81,115 infants
- c) 91,150 infants -
- d) 18,850 infants
- e) 88,850 infants

279. If the sex ratio at birth for country Y was 106:100 then it is correct to conclude that the proportion of female birth

was

- a) 515
- b) 48.5
- c) 975
- d) 985
- e) 994

282. Which of the following is not appropriate for a null hypothesis?

- a) The mean IQ in male students is different from that of FEmale students
- b) IQ and nutrition status in first year of life are unrelated
- c) The IQ of medical students is 110
- d) IQ can be determined from birth weight
- e) None of the above

283. In which of the following situations would you use study situations would you use a bar chart to represent the data?

- a) the intelligence quotient in sample of health professionals
- b) the type of illness in a sample of patients attending a health facility
- c) the relationship between height and FEV
- d) the difference between two population means
- 284. Which of the following statements is true?
  - a) Mature forms of diseases causing agent appear in definitive host
  - b) Immature forms of disease causing agents appear in definitive host
  - c) Mature forms of disease causing agents appear intermediate host
  - d) None of the above is true.

285. During communicable diseases control program:-

- a) Epidemiology of the disease is not helpful
- b) Identifying a source of infection is important
- c) Identification of route of transmission is not necessary if the vector or the susceptible community is already identified
- d) Wait for endemic diseases to reach epidemic levels so as to maximize resources

286. To determine the endemicity of malaria. It is necessary to determine:-

- a) The splenic and parasite rates
- b) The spleen rate only
- c) The parasite rate only
- d) The hepatomegaly, splenic rates.
- e) The hepatomegaly, splenic and parasite rates
- 287. The ten elements of primary health care are the responsibility of:
  - a) Ministry of Culture and Social Services
  - b) Ministry of Health
  - c) Ministry of Finance
  - d) All the above
  - e) None of the above

288. Which of the following is not a pathogenic organism that infect agricultural workers who use untreated sewage

- a) Ascaris lumbricoides
- b) Entamoeba histolytica
- c) Plasmodium vivax
- d) Clornochris sinuses
- e) Ancylostoma duodenale
- 289. Minamata disease is caused through
  - a) Exposure to lead
  - b) Exposure to mercury
  - c) Exposure to asbestos
  - d) Exposure to cadmium
  - e) Exposure to iron filling

290. Surveillance is one of the elements in an integrated strategy for preventing occupational diseases and injury

- a) Analyzing of occupational hazard
- b) Medical examination
- c) Monitoring exposure and health outcome
- d) Protecting and health outcome
- e) Protecting workers from exposure
- f) Machine guarding
- 291. Functions of a health and safety committees include all the following except
  - a) Compensate injured workers
  - b) Educate workers
  - c) Monitor occupational illness
  - d) Carry out medical examination for workers
  - e) Recommend intervention to reduce occupational health
- 292. The most expensive component in municipal solid waste management is
  - a) Educating the workers
  - b) Separation at source
  - c) policy making
  - d) collection and transportation
  - e) disposal site maintenance
- 293. When assessing a site for sanitary landfill all the following factors should be considered except
  - a) water table
  - b) distance from city center
  - c) soil type
  - d) mode of transportation
  - e) nearness to airport
- 294. All of the following diseases are water washed except
  - a) Typhus
  - b) Scabies
  - c) Trachoma
  - d) Bacillus dysentery
  - e) Schistosomiasis
  - a) Schistosomiasis
- 296. Which of the following methods should NOT be used in controlling fly nuisance in ordinary pit latrine?
  - a) Burning hay or straw inside the pit
  - b) Use of insecticides
  - c) Pouring of boiling water on the surface of the latrine
  - d) Allowing lizards to live inside the pit latrines
- 298. STDs can be prevented by all the following except
  - a) Abstinence
  - b) Prompt treatment of STDs
  - c) Having one sexual partner always
  - d) Non penetrative sex

e) Treatment of secondary syphilis

299. The prevalence of a disease in a given community may be increased by the following factors except

- a) Reduction in incidence
- b) In-migration of susceptible individuals
- c) Increase in duration of disease
- d) Out migration of susceptible individuals
- e) Increase in duration of diseases

Improvement in diagnosis facilities 300. Which of the following is not a measure used in screening?

- a) Sensitivity
- b) Positive predictive value
- c) Specificity
- d) Negative predictive value
- e) None of the above
- 301. The dimension of descriptive epidemiology include
  - a) Occupation age and sex
  - b) Time and place
  - c) Person place and marital status
  - d) Person place and time
  - e) Parity residence and behavior

302. Case control studies:

- a) Usually take a long time as compared to prospective cohort studies
- b) Are less expensive than prospective cohort studies
- c) Can be used to study multiple outcomes for a given exposure
- d) Can be used to determine the incidence rates
- e) Are parts of experimental studies
- 303. The table below represents results of a screening program

	Test Result	
	Positive	Negative
Disease with disease	60	40
Status without disease	20	80

The sensitivity of the test is

- a) 60/100
- b) 180/200
- c) 60/80
- d) 40/100
- e) 18/0/220

304. Health insurance fee is based on the principal of risk pooling means:

- a) Ministry of Health will contribute together with the poor
- b) The insurance premiums are affordable by everyone.
- c) That the sick will be treated free of charge at the hospital

305. The totality of health sector contribution to GDP includes:

- a) treatment and cure of patients
- b) Health care, disease control education and research
- c) Training of nurses and doctors
- d) All the medical commodities and medicines that are produced
- e) Collaboration with other sectors
- 306. Which of this is the most effective vector of malaria?
  - a) Anthrophilic endophagic
  - b) Anthrophilic endophilic
  - c) Anthrophilic endophilic endophagic
  - d) Zoophylic endophagic
- 307. Which of the following is the most important in transmission of bacillary dysentery?
  - a) Flies
  - b) Food
  - c) Water
  - d) Sewage
  - e) Fingers

308. Which one of these is the most important for prevalence of sexually transmitted diseases?

- a) Permissiveness of society
- b) Alcohol and drugs
- c) Promiscuity
- d) Antibiotics
- e) Contraceptives
- 309. Important factors in the control of helminithic infections include all of the following except
  - a) Use of latrines
  - b) Wearing shoes
  - c) KAP of community
  - d) Eating salads
  - e) Regular deworming

310. What proportion of the Kenyan population do females in the reproductive age constitute?

- a) 39 %
- b) 50 %
- c) 70 %
- d) 20 %
- e) 15 %

312. Traditional practices are better understood contextually INCOMPLETE QUIZ

- a) As harmful to the community as witchcraft
- b) As a way of negating modern practices
- 314. The major difference between anthropological and biomedical models of health is that:
  - a) One is predominantly personality while the other is largely systematic and naturalistic
  - b) Anthropological models are irrational
  - c) Biomedical models are only applicable in specific situations

- d) Anthropological models are limited to African situations
- e) Each is only applicable in particular settings
- 315. Health systems in Kenya is characterized by
  - a) Traditional healing ad birthing
  - b) Modern medicine for the rich
  - c) Pluralism in health care delivery
  - d) Self-medication for simple ailments
  - e) Witchcraft and sorcery in remote areas
- 317. In Stevens classification of data birth weight measurements in kilograms are classified as
  - a) Binary
  - b) Interval
  - c) Ratio
  - d) Continuous
  - e) Ordinal
- 321. The field health educator is trained to do the following except
  - a) Motivate clients to accept family planning practices
  - b) Visit client s who default in their homes
  - c) Insert intra uterine devices
  - d) Demonstrate various methods of family planning to women's groups

322. When preparing and using demonstration for health education purposes, which of the following is characteristics should the educator have?

- a) The demonstration should last for a short time
- b) The demonstration should resemble target group environment
- c) The demonstration should not involve the audience the demonstration should have as many messages as possible
- d) a and b above
- e) a, b and d above
- 323. Which of the following statements is false regarding malaria?
  - a) Plasmodium falciparum is the most common species accounting for more than 90% of all malaria cases
  - b) Natural transmission of plasmodium falciparum occurs through the placenta
  - c) Regarding interaction between man and mosquito does not reduce prevalence of malaria
  - d) Chloroquine resistant malaria is an increasing problem in East Africa

325. One of the following approximates the percentage of the total annual budget of the Kenya government normally allocated to the Ministry of Health

- a) 3.5 %
- b) 7 %
- c) 12 %
- d) 14 %
- e) 20 %

326. Controlling function of management implies one of the following

- a) The ability of the manager to direct every activity of his subordinates
- b) Unity of command

- c) Ensuring that the objectives of the organization are being achieved
- d) Subordination of individual interest to those of the organization
- e) None of the above
- 327. Milk sanitation is dependent on cleanliness of
  - a) Washing of the udder
  - b) Time-temperature relationship
  - c) Portable container
  - d) a and c
  - e) a, b and c
- 328. The main single determinant of PEM in Kenya is
  - a) Family size
  - b) Infectious diseases
  - c) Altitude
  - d) Poverty ignorance

#### 332. A bar diagram representing a simple frequency distribution continuous data is called a

- a) Polygon
- b) Scatter diagram
- c) Histogram
- d) Pie chart
- 333. Which of the following is not true of intestinal helminthes?
  - a) They so seldom cause death that they are no a public health problem
  - b) Safe disposal of faeces is the single most important element in their control
  - c) Periodic mass treatment offers a cheap and easy way of controlling helminthes disease
  - d) None of the above
- 334. A community survey for schistosomiasis should take urine and stool from
  - a) old men and women because they are more at risk of being infected by the disease
  - b) Mainly women and children less than five years because they are most likely to come into contact with water most of the time
  - c) Primarily boys 5-10 years because they play in infected water most of the times
  - d) Young people 5-20 years because they best indicate level of infection
- 335. Which of the following statements is true?
  - a) Mature forms of disease causing agents appear in definitive host
  - b) Immature forms of disease causing agents appear in definitive host
  - c) Mature forms of disease causing agents appear in intermediate host
  - d) None of the above

### 336. Provision and use of pit latrines

- a) Altering the velocity of water flow in canals and streams
- b) Educating the community
- c) Use of molluscicides
- d) All the above
- 337. Which of the following is not true of intestinal helminthes?
  - a) They so seldom cause death that they are not a public problem

- b) Safe disposal of feces is the single most important element their control
- c) Periodic mass drug treatment offers a cheap and easy way of controlling helminithic disease
- d) None of the above
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  - b) Immature forms of disease causing agent appear in definitive host
  - c) Nature forms of disease causing agents appear in intermediate host
  - d) None of the above is true
- 340. During communicable disease control programmes:
  - a) Epidemiology of the disease is not helpful
  - b) Identifying source of infection is important
  - c) Identification of route of transmission is not necessary if the vector or the susceptible community is already identified
  - d) Wait for endemic disease to reach epidemic levels so as to maximize resources
- 341. One of the following statements is FALSE
  - a) Basic reproductive Rate (R0) is an indicator of the parasite success in propagating disease
  - b) If the basic reproductive Rate (R) is below  $1 (\leq 1)$  the disease eradication is possible
  - c) Vectorial capacity predicts potential number of new cases following contact between an infected people in a susceptible population
  - d) All the above statements are false
- 342. A health centre should cover population of one of the following:
  - a) 20,000 people
  - b) 30,000 people
  - c) 50,000 people
  - d) 10,000 people
  - e) 60,000 people
- 343. A Health Centre has the following facilities except:
  - a) Labour ward
  - b) In-patient
  - c) MCH $\setminus$  FP clinic
  - d) Minor operating theatre
  - e) Female and male out patients
- 344. One of the following is not a desirable requirement for manager positive supervision:
  - a) Spending his official time in trying to understand his team members as individuals with differing personal needs,

- Exercising the closest supervision on every activity of his of subordinates in aid of proper and quick disciplinary act
- c) Allowing his subordinates latitude to control their own work activities under his guidance
- d) Taking his annual leave during the years of entitlement while his organization has not solved all is problems,
- e) Giving the team members opportunity to question management decisions
- 348. In diarrhea disease of childhood
  - a) Treatment should include routine use of antibiotics
  - b) Oral Rehydration therapy is useless if there is vomiting
  - c) Early feeding results in reduction of growth impairment
  - d) Transient lactose intolerance is a common feature
  - e) The gut needs to be rested for at least 123 hours before reintroduction oral feeds

350. Education about safer sex includes all the following:

- a) Condom use with every sexual partner
- b) All of the following
- c) Faithful monogamous relationship
- d) Sticking to one sexual partner at a time

351. Patient education is important and includes all the following Except

- a) Tell him what to do and what not to do
- b) Answer his questions precisely and repeat if he does not understand
- c) Demonstrate procedure that which he is require to perform discharge
- d) Listen to what he perceives to be his concern about care received
- 352. In many given societies death is seen as:
  - a) The end of everything
  - b) A rite of passage
  - c) A result of witchcraft
  - d) Inevitable
- 353. The difference between disease and illness is that:
  - a) One is through infection and the other through witchcraft
  - b) One present in the body and the other in the mind
  - c) One has some organic background
  - d) None of the above
- 354. The main objective of environmental health practice is to:
  - a) Reduce morbidity rate
  - b) Reduce mortality rate
  - c) Increase the equality of life
  - d) Increase the life expectancy
  - e) All of the above

### 355. Once is in the human body, it interferes with:

- a) Osmotic pressure
- b) Sulphydril structure of amino acids
- c) Ribonucleic acids
- d) Active transport mechanism

e) b and d above

356. In a conventional sewage treatment plant, the BOD (biological oxygen demand) is higher at

- a) Effluent point
- b) Affluent point
- c) Confluent point
- d) Overflow point
- e) a and b above

357. The definition of Energy requirement is:

- a) Energy intake to meet growth, and obligatory losses through urine, faeces, skin and hair
- b) Energy intake adequate to meet energy needs of the average healthy person in a specified age/sex category
- c) Energy intake adequate to meet maintenance, growth and activity of the average healthy person
- d) None of the above

### e) a and b above

358. In a epidemiological investigation of current malnutrition in a community the most sensitive index would be:-

- a) Weight for age of under five years old
- b) Height for age under five years old
- c) Foods available on the market
- d) Arm circumference of schoolchildren
- e) Weight gain in pregnant women

#### 359. The main single determinant of PEM in Kenya is

- a) Family size
- b) Infection disease
- c) Altitude
- d) Poverty
- e) Ignorance

360. Which of the following foods would you recommend that the "average mwananchi" include in his diet in order to prevent Vitamin A deficiency?

- a) Beans
- b) Dark green vegetables
- c) Cod liver c8 oil
- d) Liver
- e) Avocado pears

361. The higher prevalence of goiter in mountainous areas is due to:

- a) Iodine being washed away to sea by rivers
- b) Lack of sodium chloride in mountains
- c) Goitrogenic substances more often found in high altitude are
- d) Very low level of iodine in drinking water
- e) Volcanic waters contain good amounts of iodine

362. The theory of demographic transition stipulates that:-

- a) Fertility declines before mortality
- b) Mortality declines before fertility
- c) Both mortality and fertility declines at the same time
- d) Mortality and fertility remain high even after the industry revolution
- e) All the above
- 363. Estimates of the level of the fertility and mortality in Kenya are derived from:
  - a) Vital registration of birth and deaths -
  - b) Continuous population registers
  - c) Hospital records of birth and deaths
  - d) Census and specials surveys
  - e) Guesses by demographers
- 364. Formal demography is concerned with factors affecting:
  - a) The size of the population
  - b) Ethnic, social and economic characteristics of the population
  - c) Age specific death rate minus age birth rate
  - d) Crude birth rate minus crude death
- 365. The life expectancy is a measure obtained from the table which indicates:
  - a) The number of deaths in life time
  - b) The average number of years of remaining
  - c) The number of death occurring in
  - d) The average number of survivors to
  - e) The average probability of surviving

366. The third stage of demographic transition theory characteristics by:-

- a) High birth rate and high death rate
- b) High birth rate and low death rate
- c) Low death rate and high birth ate
- d) Low death rate and low birth rate
- e) All of the above
- 367. The total fertility is:
  - a) A count of all births in as year divided by the number of women in the reproductive ages
  - b) A count of all the pregnancies in as woman life time
  - c) Summary index calculated from the schedule of age specific fertility rate
  - d) A count of all women having children
  - e) An index of the number of daughters surviving to the next generation

368. In a study of mortality, a life table provides

- a) The proportion of a population that will survive to any given age
- b) The number of years of survival remaining from birth
- c) A summary index of mortality that is independent of age
- d) The number of years of survival from any age
- e) All of the above

369. The bar diagram is a good pictorial representation of

- a) Ranked data
- b) Nominal (categorical) data
- c) Continuous data
- d) Quantitative grouped data

370. In a set of observation, the range is as measure of

- a) Frequency
- b) Variability
- c) Central tendency
- d) Normality
- e) None of the above

372. A sample is a replica of the population from which it is drawn

True or false

- a) True
- b) False
- 373. Primary health care is the responsibility of
  - a) Ministry of health
  - b) The community
  - c) Non-governmental organization
  - d) None of the above
  - e) All of the above

### 374. Community involvement in primary health care

Is an obstacle of health care delivery?

- a) Lowers the quality of health care delivery
- b) Facilitates health care delivery
- c) Provides expensive health care delivery

375. Health for all by the year 2000 will be achieved except

- a) Community participation and involvement
- b) Building more hospitals with special emphasis on cardiothoracic units
- c) Translating intersectoral collaboration
- d) Translating the 10 elements of PHC into action
- e) Training effective PHC
- 376. Village health care committee should be appointed by
- a) Community nurse enrolled nurse working at their dispensary
- b) Medical officer of health
- c) District public health officer
- d) The community
- e) The district public health nurse

377. The approximate percentage of the rural women who delivered

- a) 100%
- b) 25%s

- c) 45%
- d) 20%
- e) 75%

378. The xxx value of positive test is:

- a) 87%
- b) 67%
- c) 25%
- d) 33%
- e) 12%

379. Communities' p and q have equal age-adjusted mortality rates. Community P has a lower crude mortality rate

than Q. one may conclude that:

- a) The two communities have identical age distributions
- b) Diagnosis is more accurate in p than Q
- c) P has an older population than Q
- d) Diagnosis is less accurate in Q than in P
- e) P has a younger population than Q

380. When preparing and using demonstrations for health education purposes, the educator should make sure the demonstration has which of the following character:-

- a) The demonstration should last for a short time
- b) The demonstration should resemble target group environment
- c) The demonstrate should not involve the audience
- d) The demonstration should have as many messages as possible
- e) A and b above
- f) A,b and d above

381. To enable people to learn skills needed to solve their health problems (s) the health educator should do the

allowing except:

- a) Establish good relationship
- b) Communicate clearly
- c) Share his/her own prejudice and bias
- d) Encourage participation
- e) Summarize salient points
- 382. The advantages of using leaflets /booklet include the following except:
- a) Detailed information can be presented
- b) Vernacular language can be presented
- c) Many people, including illiterate populations can be reached
- d) Target population can be segmented
- 383. Gaseous chlorine is used in conventional water treatment because:
- a) It sterilizes the water
- b) It is cost effective

- c) Provides a residual effect
- d) It disinfects water
- e) B, c and d above
- 384. The risk of acquiring disease is measured by
- a) Incidence rate
- b) Prevalence rate already present cases
- c) Average duration of disease
- d) All the above
- 385. The predictive value of a diagnostic test depends upon
- a) Sensitivity of test
- b) Specificity of test
- c) All the above
- d) None of the above
- 386. Which of the following is an advantage of prospective study? Rest are Prospective disadvantage
- a) There is little or no bias in assessment of exposure to the
- b) Multiple disease outcomes following a selected exposure can be studied
- c) Dependence on recall by subjects in the study is minimized
- d) It is impossible to determine the true incidence rate of the disease
- e) It may be used to study "cause" of a rare disease
- 387. Reduction in prevalence of scabies Taenia capitis and eye disease

Dependent on:

- a) Source of and quality of water
- b) Quantity of water per person
- c) Proper human excrete disposal methods
- d) Personal and domestic hygiene
- e) B and d above

388. All the following are part of 5 step model for behavior change except:

a) Awareness of health personnel

- b) Awareness of the behavior that constitutes a health problem
- c) Information regarding risks associated with the behavior change
- d) Reinforcement and maintenance of the behavior change

389. In order to reach replacement level fertility, a developing country such as Kenya would need the total fertility rate

to grow at: 2.1 children per woman

- a) 6000 children per 1000 women
- b) 2000 children per 1000 women en
- c) 4000 children per 1000 women
- d) 1000 children per 1000 women
- e) 2500 children per 1000 women

390. Rural to rural migrants in Kenya are mostly:

- a) Young, unmarried and educated persons aged between 15-25 years
- b) Older married persons aged between 30 years with little or no formal education

- c) Older single persons age about 30 years with high school education
- d) Very old persons aged 45 years and above with their families
- e) None of the above
- 391. The infant mortality rate in Kenya is estimated to be: 39
- a) 87 deaths per 1000 live births
- b) 110
- c) 74
- d) 120
- e) 160
- 392. Endo-medicine means:
  - a) Illness classification
  - b) Concepts of disease prevention
  - c) Medical belief systems disease theory systems and illness classification
  - d) Traditional medicine
- 393. Health care utilization is determined by:
  - a) The characteristics of the patient
  - b) The characteristics of the disease
  - c) Both 1 & 2 above
  - d) More than just 1 and 2 above
- 394. Health care has no relationship with other institutions:
  - a) True
  - b) False
  - c) TRUE OR FALSE
- 395. A high protein diet is recommended for the patient with:
  - a) Acute gout
  - b) Acute renal failure
  - c) Extensive burns
  - d) Acute nephritis
- 396. The following is /are absolute contradiction for DPT
  - a) Febrile illness
  - b) Previous convulsions
  - c) Malnourished child
  - d) All the above
  - e) None of the above
- 397. Which of the following may be risk factors in a pregnant woman?
  - a) Age
  - b) Height
  - c) Parity
  - d) Nutritional status
  - e) All the above
  - f) A, b and c above

398. According to the 1979 census which of the following gives the correct infant mortality rate (IMR) and total fertility rate for Kenya:

<u>IMR/1000</u>	<u>TFR</u>
120	6.1
80	8.1
210	10.1
49	3.1
150	7.5

A Child of 21/2 months of age is brought to a health centre having had 1<sup>st</sup> DPT 4 weeks previously. The child has mild febrile illness. What action would you suggest?

- a) Give 2<sup>nd</sup> DPT
- b) Don't give 2<sup>nd</sup> DPT
- c) Give 2<sup>nd</sup> DPT and aspirin
- d) Treat the illness then give 2<sup>nd</sup> DPT
- e) None of the above

399. The main contributing factors in the causes of neonatal tetanus include:

- a) Traditional belief and practices
- b) Contamination of the cord
- c) Socio-economic factors
- d) A, b and c above
- e) A ad b above

400. In growth monitoring, the following is/are important:

- a) Weight of the child
- b) Height of the child
- c) Pattern of growth of the child
- d) All of the above
- e) None of the above

401. One of the following methods of FP needs highly motivated couples:

- a) Sterilization
- b) Oral contraceptives
- c) IVCDS
- d) Natural family planning
- e) Condoms

402. Anthrax is common among workers in one of the following:

- a) Textile wires
- b) Shoe makers
- c) Herdsmen
- d) Tannery workers

403. In dairy industry negative phosphatases test indicative of:

- a) High temperature short time (HTST) effect
- b) The overall nutrition value of milk is
- c) Milk is free of pathogens
- d) Milk is free from all kind of bacteria
- e) Milk is free from TB
- 404. An alternative to indiscriminate use of pesticides
- a) Government control of the importation of pesticides
- b) Pest control management strategy
- c) Adaptation to integrated pest management
- d) A and c above
- 405. Solid waste collection crew is prone to injuries:
- a) Respiratory disease
- b) Leptopirosis
- c) Plague
- d) Diarrhoea disease
- e) All the above

406. Newly developed countries such as Taiwan, Singapore, and South Korea have their national population by:

- a) High mortality rate and high fertility rates
- b) High fertility and low mortality rates
- c) Low fertility and low mortality rates
- d) All the above
- 407. If two countries have exactly the same total fertility rate it is correct to say:
  - a) Their age structures are the same
  - b) They have the same population sizes
  - c) They are growing at the same rate
  - d) Women in both countries will bear about the number of children
  - e) All the above

408. Which of these factors can bring about changes in death mortality?

- a) Technological advances in agricultural product
- b) Decease in crowded living conditions
- c) Greater diffusion of sanitary measures
- d) Only b and c above
- e) a,b and c above
- 409. The most suitable drug for prophylaxis of malaria child clinics in endemic areas of Africa is a:
  - a) Proquanil and Atovaquone
  - b) Chloroquine
  - c) Pyrimethamine
  - d) Quinine
  - e) Mepacrine
- 410. The most usual molluscicide employed against the disease of schistosomiasis in Kenya is:
  - a) Copper sulphate

- b) Warfan
- c) DDT
- d) Malathion
- e) Fresdon
- 411. The following is true of intestinal helminthes: Except
  - a) Intestinal helminithic infection so seldom cause that they are not a public health problem
  - b) Safe disposal of faeces is a single important transmission in the control of intestinal helminthes
  - c) Periodic man drug treatment offers a cheap and a way of controlling helminithic disease
  - d) All of the above
  - e) None of the above
- 412. A high rate of salmonella infection is often noted the following infection:
  - a) W. bancrofti
  - b) S. haematobium
  - c) S. mansoni
  - d) Fasciola hepatica
  - e) b and c above

413. If Kenya's population estimated at 24 million in 1990 is projected to double after 35 years then the country's

- population growth rate is:
  - a) 4% per annum
  - b) 1% per annum
  - c) 2% per annum
  - d) 5% per annum
  - e) 5.5% per annum

414. In a population with high mortality and high fertility, about 50 % of all deaths will be in children below 15 years, whereas in a low fertility population, children will account for:

- a) Under 1% of deaths
- b) 15-25 of all deaths
- c) 2-5% of all deaths
- d) 40-60% of all deaths
- e) 80-90% of all deaths
- 415. The general fertility rate is better index of fertility than the crude birth rate because:
  - a) The crude birth rate enumerates births to married women only
  - b) The general fertility rate only enumerates surviving births
  - c) Only female births are enumerated in the general fertility rate
  - d) The general fertility rate uses as a denominator only women in the reproductive age groups
  - e) The crude birth rate does not take into account morbidity
- 416. By planning managers in the Ministry of Health services can do one of the following:
  - a) Predict all changes
  - b) Ensure inter-ministerial co-operation
  - c) Anticipate the future
  - d) Ascertain effectiveness
  - e) None of the above

417. An effective manager is best characterized by one of the following

- a) He has the ability to see the organization as a whole
- b) He directs the activities of other team members achieve specific objectives
- c) He has the ability to work effectively as a team
- d) None of the above
- e) All the above
- 418. In evaluating a health program you would consider
  - a) Attractiveness
  - b) Appropriateness
  - c) Effectiveness
  - d) Efficiency
  - e) Accurate feed back
- 419. The purpose of screening a population for a particular disease or health problem is to:
  - a) Identify subject in the population at high risk of developing unfavorable outcome in future
  - b) Identify subject in population who have the disease in a sub clinical stage
  - c) Test for association between the disease and a suspected risk factor
  - d) All the above
  - e) Either (a) or (b) above

420. A study was designed to determine if cigarette smoking is the cause of lung cancer

Two groups consisting of 200 subjects each were interviewed about the past exposure to cigarette smoking. The first group consisted of subjects who had developed lung cancer and the second group consisted of subjects who had not developed lung cancer

This study was:-

- a) Retrospective study
- b) Prospective study
- c) Cross-sectional study
- d) Comprehensive study
- e) None of the above

421. The advantage of prospective studies over retrospective studies is that:

- a) They take less time
- b) They are less costly

Traditional care is usually useful to:

- c) People who are too far from modern health services
- d) Cases of witchcraft and sorcery
- e) Community's concept of causation and management of illness and diseases
- f) To illiterate and elderly members of the community
- 422. An occupational disease among textile factory workers is:
  - a) Hay fever
  - b) Bagassosis
  - c) Chronic dermatitis
  - d) Byssinosis
  - e) None of the above
- 423. The most important factor in prevention of occupational health hazards in Kenya's industries is:
  - a) Routine medical examination of workers

- b) Exhaust ventilation of the working environment
- c) Health education of workers and the management
- d) Cleanliness and good house-keeping on the factory floor
- e) Guarding of dangerous machines
- 424. Kenya's national social security fund act is directly administered under one of the following:
  - a) The ministry of labor
  - b) The ministry of finance
  - c) The ministry of health
  - d) The ministry of culture and social services
  - e) The ministry of man power development and employment
- 425. The life expectancy is a measure obtained from the life table indicates:
  - a) The number of death in a life time
  - b) The average number of years of survival remaining
  - c) The number of deaths occurring in one year
  - d) The average probability of surviving a lifetime
- 426. The purpose for which epidemiology investigations are carried is:
- a) Provision of data necessary for planning and evaluating care
- b) Identification of methods used to control disease
- c) Description of the natural history of disease
- d) All of the above
- 427. Measures of disease frequency include:
- a) Odds ratio and relative risk
- b) Prevalence and incidence
- c) Sensitivity and specificity
- d) Prevalence and duration
- e) None of the above

428. In Kwashiakor:

- a) There is deficiency of both protein and energy
- b) There is deficiency of protein only
- c) Treatment is by high protein diet only
- d) Trace metal deficiency have role in the formation of edema
- 429. As regard balanced diet:
- a) A mixture of various cereals and greens can adequate essential acids
- b) One always needs animal protein to provide essential amino acids
- c) Histidine is an essential amino acid in infant
- d) Neonates milk for normal growth
- 431. Health for all by the year 2000 will be achieved all this except:
- a) Community participation and involvement
- b) Building more hospitals with special emphasis cardiothoracic
- c) Intensifying intersectoral collaboration
- d) Translating the ten element of PHC into action
- e) Training effective PHC managers

- 432. A community health worker learns all the following Except
- a) Bury or burn rubbish
- b) Treat simple cuts
- c) Give injections
- d) Apply liniments
- e) Build dish drying racks
- 433. Health institutions in Kenya consist of the following category except:
- a) Health centers
- b) Hospitals
- c) Dispensaries
- d) Mobile clinics
- e) Village health posts

434. Which statistical test is most appropriate for testing association between two attribute

- a) T test
- b) Paired T test
- c) T test for 2 independent groups
- d) Chi-square (x2) test

For question 432-433

432. 10 patients were given a particular drug in the hope of reducing blood pressures. Their blood pressure was measured before and after treatment:

- a) Test for 2 independent samples
- b) Pearson correlation coefficient
- c) Rank correlation test
- d) Paired T test
- e) Chi square (x2) test

433. If the difference between the mean blood pressure after treatment with drug was found to be significant at the 5% significance level. Which of the following conclusions would not be correct?

- a) If the Null hypothesis is true and the drug was repeated 100 times such an extreme difference would occur not more than 5 times
- b) The chance of such an extreme difference being obtained in the absence of the drug having any real effect is less than 0.05
- c) Reject the Null hypothesis
- d) Accept the Null hypothesis

434. If the difference between mean blood pressure before and after treatment was not significant at the 5%

significance at level what would you conclude?

- a) The drug was effective
- b) The drug was not effective
- c) There is sufficient evidence to accept that the drug was effective
- d) Either a or b above
- e) Either c or d above
- 435. Total births in a year x 1000

Total number of women aged 15-49

The above rate/ratio is called:

- a) Crude birth
- b) Child-woman ratio
- c) General fertility rate
- d) gross reproduction rate
- 436. The gross reproduction rate is equal to the total fertility rate times:
- a) The proportion of male births
- b) The proportion of male deaths
- c) The proportion of female births
- d) The proportion of female deaths
- 437. If all Kenyan couples decided immediately to limit fertility to a 2 child family, then population would:
- a) Stop growing
- b) Start declining immediately
- c) Continue to grow indefinitely
- d) Continue to grow for at least 60-70 years but gradually stop growing
- 438. Many communities conceptualize health as:
- a) Complete harmony between interpersonal, supernatural and ecological realms
- b) Being at peace with ancestors
- c) Providing parties to one's relatives
- d) Avoiding witchcraft and evil eyes
- 439. Culture refers to:
- a) Community development
- b) A set of beliefs, practices, skills and knowledge That is shared among a given group of people
- c) Study of man and social organization
- d) Ethnic groups
- 440. AIDS education about safer sex includes all the following except:
- a) Condom use with every sexual partner
- b) Faithful monogamous relationship with uninfected partner
- c) Sticking to one sexual partner at a time
- d) Reducing sexual partners
- 441. Patient education is important and includes all the following except:
- a) Answer his questions precisely and repeat if he does
- b) Carefully dictate what he should do and what he should not do
- c) Demonstrate procedures that he is required to perform after discharge
- d) Listen to what he perceives to be his concern about the medical care receive
- 442. The characteristic of chronic diseases have all the following except
- a) Slow insidious onset
- b) Long duration
- c) Disable a person shortly before they kill him/her

- d) Great psychological and financial impact on the patient, family and society as a whole
- e) Not limited to an age group
- 444. Client education about family planning includes all the following except:
- a) Counseling the client about the appropriate method
- b) Demanding the husband involvement
- c) Reassessing the client
- d) Soliciting compliance
- 445. Write true or false
- a) A health center is a specialized health care institution False
- b) A community nurse is a registered nurse with qualifications in medicine and surgery False
- c) The Bamako initiative is a component of the Alma Ata declaration True
- 446. Indicate which of the following is in the essential drugs list for health centers
- a) Ismelin
- b) Chloramphenicol
- c) Streptomycin
- d) Penicillin V
- 447. Indicate which of the following members of the district health management teams are:
- a) Director of mental health
- b) Chief nursing health
- c) Public health officer
- d) Medical officer of health
- 449. Which of the following is not true of intestinal helminthes?
- a) They so seldom cause death that they are no a public health problem
- b) Safe disposal of faeces is the single most important element in their control
- c) Periodic mass treatment offers a cheap and easy way of controlling helminthes disease
- d) None of the above
- 450. Which of the following is not a measure of dispersion?
- a) Range
- b) Mid-range
- c) Mean absolute deviation

451. Variance an appropriate pictorial presentation of data set comprising serum cholesterol levels in a simple being studied is:

- a) Pie-hart
- b) Bar-graph
- c) Histogram
- d) Scatter plot
- 454. A necessary assumption for computation of the median from frequency table is that:
- a) All the observation are evenly distributed
- b) The observation follows the normal distribution
- c) In the class that contains the median the observation

- d) No assumption is necessary
- e) The median is a better measure of location central tendency
- f) The observation show a markedly skewed distribution
- g) The mean is close to the median
- h) There is no need to perform hypothesis test
- i) The distribution of the observation approximates the normal distribution
- 455. An appropriate statistical test to investigate the association between two categorical variables is:
- a) The Z-test for a single population
- b) The two sample t-test
- c) The chi-square test
- d) Rank correlation test
- 456. The major techniques used for assessing nutritional status are:
- a) Physicals findings and measurements
- b) Blood test and data collection
- c) The problem solving process
- d) The nutritional survey method
- e) a and b
- 457. Depletion of substance fat may be a result of
- a) Dieting
- b) Under nutrition
- c) Illness
- d) Only b and c above
- e) All of the above
- 458. The following are the most prevalent nutritional deficiencies in the world today:
- a) Kwashiorkor, marasmus and anemia
- b) PEM, xerophthalmia and scurvy
- c) PEM, anaemia and goiter
- d) PEM xerophthalmia and beriberi

459. All except are good sources of vitamin A:

- a) Egg, yolks potatoes
- b) Dark green and deep yellow vegetables
- c) Beef liver
- 460. Which of the following is false?
- a) Iron is widespread in foods, so a deficiency is rare iron is wide spread in foods, so as deficiency is rare.
- b) Everyone needs the same nutrients throughout life but in differing amounts
- c) Since ascorbic acid promotes ion -absorption iron and vitamin C
- d) And vitamin C containing foods are best eaten together
- e) Iron deficiency anemia is a problem for young children and women

461. Men attending a sexually transmitted disease clinic had their urine screened for white blood cells to evaluate whether this was a good screening test for gonococol urethritis. Urethral cultures for gonorrhea were taken on all

patients as the standard against which to evaluate the urine screening test. The positive urethral cultures, 20 had white cells in their urine and negative urethral cultures, 100 men had no white cells in their urine and positive urethral cultures, and 80 men had no white cells in their urine and negative urethral cultures.

462. What is the sensitivity of the screening test?

- a) 20 %
- b) 30 %
- c) 40 %
- d) 50 %
- e) 60 %
- f) 67 %
- g) 70 %
- h) 75 %
- i) 80 %
- 463. What is the specificity of the screening test?
- a) 20 %
- b) 30 %
- c) 40 %
- d) 50 %
- e) 60 %
- f) 67 %
- g) 70 %
- h) 75 %
- i) 80 %
- 464. What is the positive predictive value of the screening test?
- a) 20 %
- b) 30 %
- c) 40 %
- d) 50 %
- e) 60 %
- f) 67 %
- g) 70 %
- h) 75 %
- i) 80 %

#### 465. The following statements are true, except:

- a) Relative risk can be less than, greater than or equal to 1
- b) Odds ratio can only be calculated in retrospective studies
- c) The odds ratio is a good approximation to the relative risk for diseases

- Attribute risk represents the proportion of diseases which would not occur in the absence of the risk factor of interest
- e) Relative risk cannot be calculated directly in retrospective studies
- 466. The following statements are all true, except:
- a) Random sampling will always provide a sample which is representative of the population with respect to a given characteristic.
- b) An advantage of stratified sampling is that it reduces sampling variability
- c) Systematic sampling could result in bias if there is a periodicity in the population
- d) Cluster sampling of a population will yield a probability sample
- e) In cluster sampling, it is preferable to have large numbers of small samples than numbers of large samples
- 467. In Kenya, the major share of ministry of health's recurrent budget expenditure goes to:
- a) Running health centers and dispensaries
- b) Curative health services
- c) Biomedical research activities
- d) Training of medical and allied health personnel
- e) Preventive and promotive health service
- 468. Controlling function of management means one of the following:
- a) The manger directs every activity of his subordinates
- b) Unity of demand
- c) Ensuring that the objectives of the organization are achieved
- d) Subordination of individual interest to those of the organization
- e) None of the above

#### 469. An important characteristic of policy is one of the following:

- a) Originality
- b) Number of diseases covered
- c) Attractiveness
- d) Flexibility
- e) None of the above
- 470. In the advert of Kenya's policy of district focus for rural development, decision making on health development projects to be recommended to the government is made by:
- a) The local Member of Parliament
- b) The district medical officer of health
- c) The county council
- d) The district development committee
- 471. One of the following air borne contaminants may be described as a "chemical asphyxiants"
  - a) Sulphur dioxide
  - b) Phosgene
  - c) Carbon monoxide

- d) Ammonia
- e) Ozone

472. An occupational health hazard associated with wet cell batteries manufacturing industry is:

- a) Mercury poisoning
- b) Lead poisoning
- c) Chronic dermatitis
- d) Lung cancer
- e) Cancer of kidney

473. One of the following is the commonest pollution in Kenya's industries:

- a) Non-ionizing radiation
- b) Irritant gases
- c) Noise
- d) High températures

474. In evaluating a health program you would not consider:

- a) Appropriateness
- b) Efficiency
- c) Effectiveness
- d) Attractiveness

475. Write true or false

- a) An aqua privy does not need a cistern flush True
- b) Building costs for a tank system are above 20% higher than a VIP
- c) One can keep fishes in the tertiary of sewage oxidation pond system True
- d) The main purpose of a lid
- 476. Which one is not a valid argument for "waste analysis"?
  - a) Helps to recycle waste
  - b) Tipping saves time in disposing
  - c) Facilitates planning for disposal and treatment
  - d) Has a salvage potential

477. Assessment of dietary intake practices in a rural community in Kenya could be undertaken using all the following except:

- a) Keeping of food records
- b) Conducting 48 hour dietary recall
- c) Conducting 24 hour dietary recall
- d) Using a food diary

478. Community participation is important

- a) For establishing project ownership and empowerment
- b) As it averts ignorance
- c) As it is cheap for the project
- d) As a requirement for PHC

e) As a demonstration of chiefs powers

479. All the following epidemic measures are required to control incidence of cholera and typhoid except:

- a) Provision of effective treatment facilities
- b) Use of portable water
- c) Quarantine
- d) Sanitary and stringent control in food+ drink
- e) Report of cases to health authorities

480. The following statements are all true except:

- a) Random sampling will always provide a sample which is representative of the population with respect to a given characteristic
- b) An advantage of stratified sampling is that it reduces sampling variability
- c) Systematic sampling could result in bias if there is a periodicity in the population
- d) Cluster sampling could result in bias if there is a periodicity in the population
- e) Cluster sampling of a population will yield a probability sample
- f) In cluster sampling, it is preferable to have large numbers of small samples than small numbers of large samples
- 481. Which of the following is not true of a cohort study?
  - a) It can either be prospective or retrospective
  - b) There is a comparison group
  - c) The subjects are selected on the basis of the outcome exposure
  - d) Incidence rates are determined
  - e) It is usually expensive

482. A study design for which the investigator is referred to as:

- a) Case-control study case study
- b) Cohort study
- c) Cross sectional study
- d) Experimental study
- 483. What are the requirements for a good sample?
  - a) It must be representative of the population
  - b) There must be adequate coverage of the sample
  - c) The sample must be large enough
  - d) A and above

e) a, b and c

484. Assessment of dietary intake practices in a rural community in Kenya could be under taken using all the following except:

- a) Keeping of food records
- b) Conducting 48 hour dietary recall
- c) Conducting 24 hour dietary recall
- d) Using a food frequency questionnaire
- e) Conducting house hold observation

485. The most appropriate nutritional assessment system for establishing trends in nutritional situation of children over time is:

- a) Nutritional monitoring
- b) Nutritional screening
- c) National nutritional surveys
- d) Nutritional surveillance
- e) Growth monitoring
- 486. Tick the false statement among the following:
- a) Consumption of iodized salt in Kenya is wide spread T
- b) Ascorbic and enhances absorption of iron from a metal T
- c) Ascorbic acid enhances absorption of iron from a metal T
- d) Potassium iodine is commonly used in iodization of salt T
- e) Salt should be added to food at the beginning of cooking process T
- f) In Kenya, salt for human and animal consumption is iodized
- 487. Which of the following constitute the basic cause of under nutrition in most developing country communities?
  - a) Poverty and poor macro-economic policies
  - b) Inadequate food intake and diseases
  - c) Household food insecurity and inadequate access to health services
  - d) Inadequate maternal and child care and ignorance
  - e) Poverty and household food insecurity

#### 488. Which of the following is not a symptom of moderate P.E.M?

- a) Lower than normal rate of growth
- b) Loss of weight
- c) Edema, hair and skin changes
- d) Slowing of skeletal growth
- e) Increased predisposition of infections

#### 489. The sick role can be described as:

- a) Obligations and expectations of all patients
- b) The condition of being sick
- 490. The activity of epidemiology is/are:

- a) Screening of population(s)
- b) Evaluation of preventive/ control programs
- c) Identification of disease determinants
- d) B and c
- e) A,b and c
- 491. Measures of disease frequency include the following except:
  - a) Point of prevalence
  - b) Predictive value
  - c) attack rate
  - d) Period of prevalence

#### 492. Which of the following life table functions is referred to as the mortality rate?

- a) nq<sub>x</sub>
- b) I<sub>x</sub>
- C) Nd<sub>x</sub>
- d)  $e^{o_x}$
- e) xnl<sub>x</sub>
- 493. The balance between crude birth rate and crude death rate without taking into account net migration is known as:
  - a) Crude rate of natural increase
  - b) Rate of population growth
  - c) Vital index
  - d) Total fertility rate
  - e) General fertility rate

494. Estimates of the levels of fertility and mortality in Kenya are mostly derived from:

- a) The national registration of births, deaths, marriages and divorce VITAL REGISTRATION
- b) Hospital records of births and deaths
- c) Guesses by demographers
- d) Censuses and special surveys
- e) Secondary data such as journals

#### 495. Population in the second stage of demographers transition are characterized by one of the following

- a) High mortality and high fertility
- b) Low fertility and high mortality
- c) Low mortality and low fertility
- d) Negative population growth rate
- 496. One of the following conditions is more likely to be caused by an ergonomic factor:
  - a) Chronic fatigue syndrome (CFS)
  - b) Skeletal flourosis (SF)
  - c) Infantile cynosis Syndrome (ICS)
  - d) Carpal Tunel syndrome (CTS)
  - e) Presbycusis syndrome (PS)
- 497. Sectors which export the greatest number of people to occupational health hazard in Kenya are:
  - a) Leather and transport
  - b) Agriculture and transport
  - c) Health care and mining
  - d) Building + construction and agriculture
  - e) Jua kali (hot sun or informal sub-sector) as agriculture

498. Aids education about safer sex includes all the following:

- a) Condom use with every sexual partner
- b) None
- c) Faithful monogamous relationship
- d) Sticking to one sexual partner at a time

499. Patient education is important and includes all the following except:

- a) Answer his questions precisely and repeat if he does
- b) Carefully dictate what he should do and what he should not do
- c) Demonstrate procedures that he is required to perform after discharge
- d) Listen to what he perceives to be his concern about the medical care receive

500. Identify the false statements below concerning school health

- a) School health is important because students are rebellious and can bulldoze events
- b) School health is an attainable long term national goal
- c) School health has a multiple effect that extends to parents and the community

501. The characteristic of chronic diseases have all the following except:

- a) Slow insidious onset
- b) Long duration
- c) Disable a person shortly before they kill him/her
- d) Great psychological and financial impact on the patient, family and society as a whole
- e) Not limited to an age group
- 502. Which of the following are more risky to a woman?
  - a) Giving birth at the age of 30 years
  - b) Giving birth at the age of 14 years
  - c) Giving birth at the age of 42 years
  - d) Giving birth at the age of 35 years
  - e) Giving birth at the age of 16 years
- 503. Children between the ages of 6 months and three years should be weighed:
  - a) Every week
  - b) Every month
  - c) Every two weeks
  - d) Every three months
  - e) Every six weeks
- 504. The five set methods for behavior change include the following except:
  - a) Training skills required for behavior change
  - b) Incentives for behavior change
  - c) Reinforcement and maintenance of behavior change
  - d) Awareness of behavior that constitutes a health problem

507. Which of the following is not a common complication of pregnancy?

- a) Postpartum hemorrhage
- b) Puerperal sepsis
- c) Infertility
- d) Obstructed labor
- e) Ante partum hemorrhage
- 508. Kenya's infant mortality rate is estimated to be: 32 per 1000 live births
  - a) About the same rate as that of developed countries
  - b) Double the rate in developed countries
  - c) Over six times higher than the rate in developed countries
  - d) Slightly lower than the rate in developed countries
  - e) Far lower than the rate in developed countries
- 509. Measures used in screening programs include the following except
  - a) Prevalence rate
  - b) Sensitivity of the test
  - c) Specificity of the test
  - d) Predictive values
  - e) Systematic error

#### 510. A double blind is usually one in which

- a) Only the patient is aware of the nature of treatment
- b) Only the investigator is aware of the nature of treatment
- c) Only the patient is not aware of the nature of treatment
- d) Both the investigator and the patient are aware **NOT** of the nature of treatment
- e) The study is done on blind patients
- 511. the most important dimensions in descriptive epidemiology are:

- a) time and place
- b) Person and place
- c) time place and person
- d) Person and time
- 512. A modern post-transitional population, in comparison to pre-modern population will have:
  - a) A smaller average number of children surviving to adulthood
  - b) A younger age sex population structure
  - c) A higher dependency ratio
  - d) A large proportion of children surviving to adulthood
  - e) A lower life expectancy

513. If Kenya's population is growing at 2 % per annum while Japan's population is growing at  $\frac{1}{2}$ % p.a then it is correct to conclude that the population will double after

- a) 30 years and 35 years respectively
- b) 35 years and 70 years respectively
- c) 35 years and 140 years respectively
- d) 23 years and 70 years respectively
- e) 17 years and 35 years respectively

514. Between 1980 and 1990,s life expectancy for a Kenyan child born today has

- a) Increased by an average of five years
- b) Increased to the level found in the developed countries
- c) Stayed in the same level as it was in the previous decade
- d) Decreased by 5-7 years on the average
- e) Decreased by 20-30 years on the average

515. According to the 1998 Kenya demographic and health survey, the age group with the highest age specific fertility was:

- a) 15-19 years age-group
- b) 20-24 years age-group
- c) 25-29 years age-group
- d) 30-34 years age-group
- e) 35-39 years age-group

516. Rural to rural migrants in Kenya are mostly:

- a) Persons aged around 30 years, mostly married with little or no formal education
- b) Persons aged between 18-25 years, mostly single, and highly educated
- c) Persons aged between 18-25 years, mostly single, and with little or no formal education
- d) Old persons over 50 years, married, and with little or no formal education
- e) Old persons over 50 years, married and highly educated
- 518. With reference to soil transmitted helminthes the transmission of roundworms can be described as:
  - a) Direct
  - b) Modified direct
  - c) Indirect
  - d) Modified indirect
  - e) Direct
- 519. The most important measure in the control of an outbreak of diarrhea disease is
  - a) Chemoprophylaxis for contacts
  - b) Chemotherapy for cases of contacts
  - c) Rehydration of cases
  - d) Immunization of cases and constancy
  - e) Boiling of drinking water
- 520. All the following are important in the investigation of an epidemic except
  - a) Verification of diagnosis
  - b) Confirmation of existence of epidemic
  - c) Plotting cases on a map
  - d) Epidemic history taking
- 521. Soil transmitted helminthes in the tropics are the following except
  - a) cause little morbidity
  - b) Cause little mortality
  - c) More common in children
  - d) Easy to control
  - e) Easy to eradicate

- 522. Sexually transmitted infections in the tropics are the following except
  - a) Are on the decline in rural areas
  - b) Are on the decline in urban areas
  - c) Affect economically active population
  - d) May cause a decline in life expectancy
  - e) Are stigmatized
- 523. Proteins are nutrients needed in the body for:
  - a) Body building and energy
  - b) For providing fat
  - c) For slowing body development
  - d) To excrete waste such as nitrogen
- 524. Proteins are classified into
  - a) Three major groups globular, membrane, fibrous
  - b) Two major groups
  - c) Four major groups
  - d) One major group
- 525. 3 important Micronutrients of public health are:
  - a) foliate, vitamin D, vitamin A
  - b) Vitamin A, iron and iodine
  - c) Zinc, vitamin A and iodine
  - d) Iron, iodine and vitamin K
- 526. Three rich sources of vitamin A are:
  - a) Red palm, carrots, dark leaves
  - b) Fat, groundnuts and liver
  - c) Kidney, cabbage, carrots
  - d) Fresh milk, breast milk, bananas
- 527. Three underlying causes of malnutrition include:
  - a) Household food insecurity, inadequate child care, limited access to basic services
  - b) Reproduction process, limited basic services and natural resources
  - c) Inadequate maternal child care, food beliefs and practices house hold food insecurity
  - d) Political structures and policies, inadequate care, inadequate health services
- 528. Kwashiorkor is caused by lack of:
  - a) Protein, energy
  - b) Protein only
  - c) Carbohydrates fat and mineral salts
  - d) Protein water roughage
- 529. The following are true of illness disease except:
  - a) Both manifest in signs and symptoms
  - b) Neither has identifiable causative agent
  - c) Some are socially stigmatized
  - d) Either can be chronic
- e) Both cause one to feel unwell
- 530. Health is best defined as:
  - a) Absence of infection and illness
  - b) Complete harmony between physical, social ecological, interpersonal and the supernatural realms.
  - c) Harmony between the living and the living dead
  - d) Balance interactions between an individual and relatives
  - e) Harmony between the family and the social setting

531. People's behavior determines their health positively and/or negatively. In order for health workers to improve health of the community, one of the following is the most important intervention

- a) Discourage all unhealthy behavior
- b) Ban all traditional healing practices
- c) Understand the reasons behind people's behavior and discuss with them
- d) Involve local chiefs in health campaigns
- e) Employ more community health workers to cope with the problem
- 532. Members of a community seek health care at a given facility because
  - a) They have no alternative
  - b) The nearer the better
  - c) Of chronic and acute diseases
  - d) It is socially, culturally and physically accessible

- e) Drugs are usually available
- 533. The most important factor in protection of workers against occupational health hazards in Kenya industries is:
  - a) Periodic medical examination of workers
  - b) Occupational health education of workers and the management exhaust ventilation of the working environment
  - c) Guarding all dangerous machines
  - d) Providing protective clothing

534. An occupational disease associated with use of industrial solvent is:

- a) Hey fever
- b) Byssinosis
- c) Fibrotic pneumoconiosis
- d) Narcosis
- e) Itai- Itai

535. An integrated MCH clinic does no include:

- a) Vaccination for children
- c) Nutrition advice to mothers
- d) Child-spacing services
- e) Resuscitation of new borns
- f) Simple treatments

536. The following workers will usually be deployed in a MCH clinic except:

- a) Family health educator
- b) Nutritionist
- c) Enrolled community nurse
- d) Community health worker
- e) Patient attendant
- f) Consultant orthopedic surgeon
- 537. Which of the following flow pattern best illustrates the flow in an ideal health center MCH clinic?
  - a) Registration, examination/ advice for mothers and children, dispensing, immunization, weighing.
  - b) Registration, weighing, examination/advice for mothers and children, dispensing immunizations. Dispensing
  - c) Registration, weighing, examination/advice for mothers and children, immunization dispensing
  - d) Weighing, registration, immunization, examination/advice of mothers and children, dispensing
  - e) ] health education, registration, examination/advice of mothers and children, referral, dispensing
- 538. Which of the following is not an essentially equipment in the MCH clinic
  - a) Adult weighing and height scale
  - b) sphygmomanometer
  - c) Fetal stethoscope refrigeration and or stethoscope
  - d) Suction machine
- 539. All the statements below are correct regarding the definition of PHC except one:
  - a) Essential health care
  - b) University accessible health care
  - c) Health care delivery where community is participant
  - d) Affordable health care
  - e) Integral health care system
- 540. One of the following is not a basic consideration of PHC:
  - a) Health education
  - b) Water and sanitation
  - c) Family planning
  - d) Homes for the elderly
  - e) Immunization ad child health
- 541. Which one of the following is NOT a correct characteristic of PHC?
  - a) Equitable distribution of health care resources
  - b) Intersectoral collaboration
  - c) Community involvement
  - d) Presence of a flying-doctor service for emergencies
  - e) Promotion of community pharmacy
- 542. The elements of PHC include all the following except one:
  - a) Maternal and child health

- b) Dental and mental health
- c) Management of endemic diseases

543. Patient teaching is done for the following reasons except

- a) Enable the patient to cope with the following reasons except.
- b) Enable the patient to cope with illness/disability
- c) Meet the needs of the patient promote health
- d) Health care provider has a right to fulfils his curiosity
- e) Patient has a right to know

544. Barriers to communicating for health include the following except:

- a) Age
- b) Height
- c) Poor relationships
- d) Sex
- e) Language

545. A health educator/reinforcement talk aimed at reducing diarrhoea diseases by 20% in 12 months must include all the following except:

- a) Provision of clean water
- b) Well prepared health education
- c) Creating an enabling process for environmental oriented behavior modification
- d) Forced (by public health act) to dig toilets
- e) Using proper teaching aids and correct educational sessions
- 546. Which of the following statements is not true about planning of health services?
  - a) Involvement of health care providers in drawing plans cause lack of acceptance of the plan
    - b) Information of existing programs is necessary
    - c) Implementation needs are built in the plan
    - d) Assessment of community resources is necessary
    - e) Health indicators are used to define goals
- 547. Which of the following is no true about positive supervision?
  - a) Recognize intelligence and ability of each individual
  - b) Avoid fault finding about minor details
  - c) Always set the standards of performance
  - d) Draw rules and guidelines together with all members of the team
  - e) All the above
- 548. Good sources of calcium are:
  - a) Breast milk. Milk, small fish, dark green vegetables
  - b) Finer millet, carrots, bananas, and potatoes
  - c) Potatoes, milk, oranges and pumpkin
  - d) Beans, peas, maize and wheat
- 549. Water soluble vitamins are:
  - a) Vitamin A, D, C, B, thiamine
  - b) Vitamin C, B, B12, thiamine
  - c) Vitamin B, vitamin E and K
  - d) Vitamin C, Biotin, Vitamin K.
- 550. Fat soluble vitamins are:
  - a) Folacin, niacin, E
  - b) Vitamin D, A, K and E
  - c) Vitamin E, C and Biotin
  - d) B12, A, K and riboflavin
- 551. All except one can harm and affect the baby's growth while in the uterus:
  - a) Mechanical injury
    - b) X-rays
    - c) The mother smoking a great deal
    - d) ALL OF THE ABOVE