

SECTION I: MULTIPLE CHOICE QUESTIONS:

1. If a new effective treatment is initiated and all other factors remain the same, which of the following is most likely to happen?

- (a) Prevalence will not change. ~~x~~
- (b) Incidence will not change. ~~x~~
- (c) Incidence and prevalence will both decrease. \checkmark
- (d) Neither incidence nor prevalence will change. ~~x~~
- (e) Incidence and prevalence both will change. ~~x~~

prevalence will decrease

2. Which of the following is best indicator of severity of a short duration acute disease?

- (a) Proportionate mortality
- (b) Cause-specific death rate. ~~xx~~
- (c) Case-fatality rate. \checkmark
- (d) Incidence rate. ~~x~~
- (e) Adjusted death rate. ~~x~~

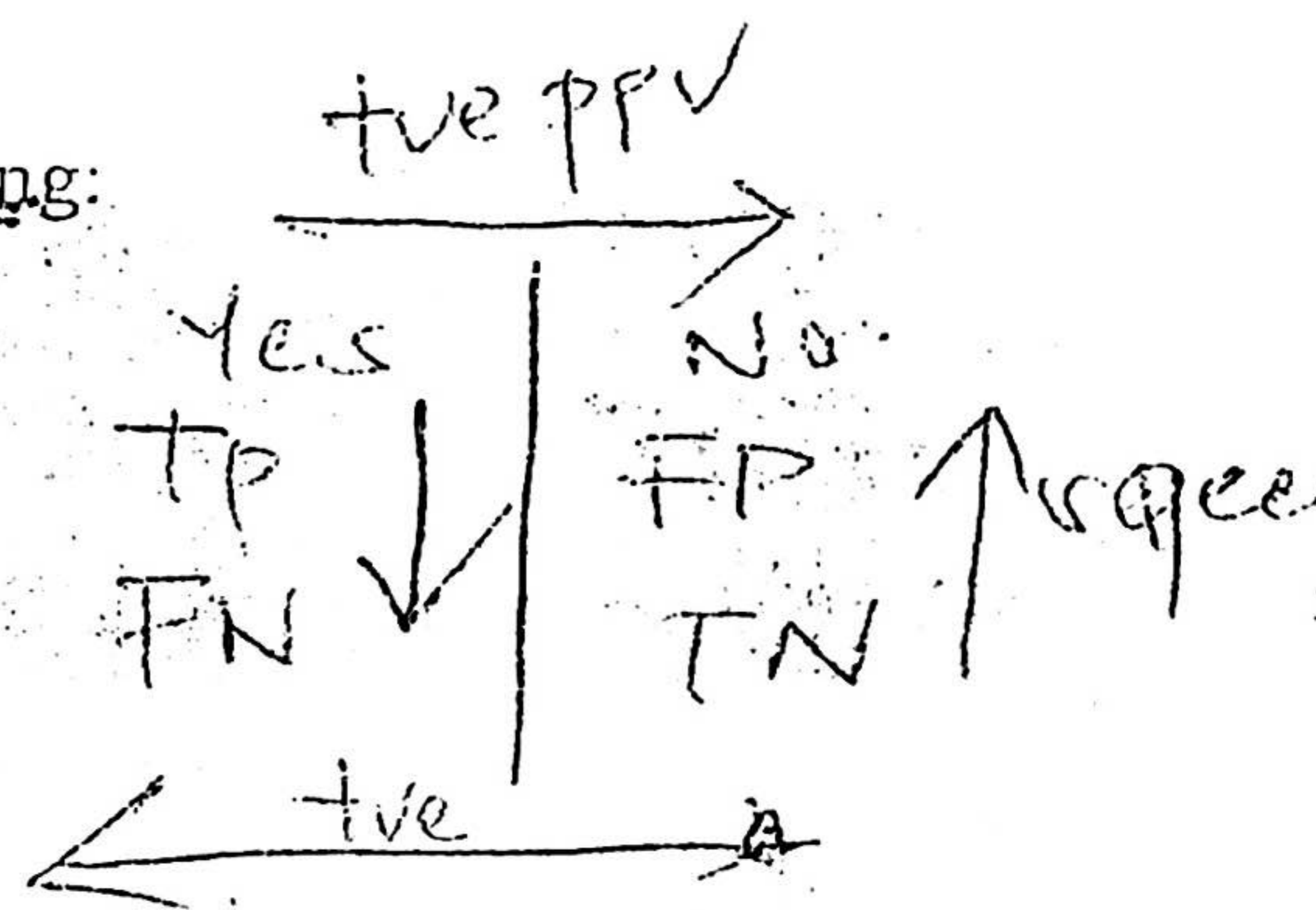
deaths from a specific disease / cases of that disease

3. Epidemiology is concerned with the following except:-

- (a) Treating of sick people in the population. ~~(a)~~
- (b) Determining high-risk individuals in the population. \checkmark
- (c) Determining the burden of health-related problems in populations. \checkmark
- (d) Identifying causes of diseases. \checkmark
- (e) Providing data necessary for planning purposes. \checkmark

4. Which of the following is not a measure used in screening:

- (a) Positive predictive value
- (b) Sensitivity \rightarrow will indicate disease \rightarrow
- (c) Accuracy
- (d) Specificity
- (e) Relative risk (measure of assoc.) ~~(e)~~



5. In which of the following variables is the bar chart appropriate in presentation of data:

- (a) Diastolic blood pressure
- (b) Sugar levels
- (c) Type of cancer. \checkmark
- (d) CD4 count
- (e) IQ scores

Bar chart

Qualitative - categories

Quantitative

discrete continuous

6. The distribution of a population is known to be markedly skewed, the appropriate measure of location is the:-

- (a) Median
- ~~(b) Mean~~
- (c) Midrange**
- (d) Range
- (e) Frequency table

$$3 \left(\frac{\text{mean} - \text{mode} (\text{mode})}{SD} \right)$$

zero is arbitrary
Calendar, temp

7. In Steven's classification of data an example of an interval variable is: Labels

- (a) Birth-weight - ratio
- ~~(b) Temperature~~ *Interval*
- (c) Grouped data**
- (d) Race - *Nominal*
- (e) Height \rightarrow Ratio

- ① Nominal - Rank
- ② Ordinal - Order
- ③ Interval - Order, Arbitrary
- ④ Ratio

8. Mos measures in the prevention/control of a communicable can be taken at all the following levels:-

- (a) Reservoir
- (b) Exit of agent from reservoir**
- ~~(c) Transmission~~
- ~~(d) Entry into host~~
- (e) Inside host

9. One of the following characteristics of vectors can be used to design control/eradication strategies

- (a) Anthrophilic
- ~~(b) Endophagic~~
- (c) Endophilic**
- (d) Exophagic
- (e) Exophilic



10. Major vectors of malaria in sub-Saharan Africa are all of the following except:

- ~~(a) Anthrophilic~~ *✓ - bites human*
- ~~(b) Endophagic~~ *✓ Endophagic enters house to feed.*
- ~~(c) Endophilic~~ *✓ Rest inside house after feeding.*
- ~~(d) Undergo hibernation~~
- (e) Undergo aestivation**

A health system reference to burden of disease implies measurement of:

- (a) The extent of negative effect on the population of the presence of the disease(s).
- (b) The number of medical personnel who are needed to treat the disease(s). *xx*
- (c) The burden of the budget that the health system has to bear. *x*
- (d) The weight that each sector in the economy carries from the disease.
- (e) The epidemiologic spread of the disease.

A system where market and planned economy features exist side by side is classified as:

- (a) Free and fair economy *xx*
- (b) Capitalistic and free economy *xx*
- (c) Mixed economy
- (d) Communist and equality economy
- (e) True people's economy.

free - No central

- (1) Traditional
- (2) free
- (3) central
- (4) mixed

Incremental changes in the health sector may be understood through:

- (a) Economy marginal analysis. *uncommon*
- (b) Things as they are in the system
- (c) The process of serious imagination in the sector
- (d) The health matters are always marginal
- (e) The costs of changing health care processes *↓*

Two major risks of adverse selection that social health insurance plans have to pay for:

- (a) Rural and young population *x*
- (b) Army, police and uniformed groups. *xs*
- (c) The chronically ill and the indigents (the very poor in society) *x*
- (d) Overuse and misuse of health care *✓*
- (e) Workers in the informal sector

Allocative efficiency in delivery of health care refers to:

- (a) Technically correct delivery of health care
- (b) Produce care for the largest number of people from a set of resources
- (c) Selection and location of the services to be produced.
- (d) Selection of who to produce and where the services are to be produced.
- (e) Selection how and which services are to be produced.

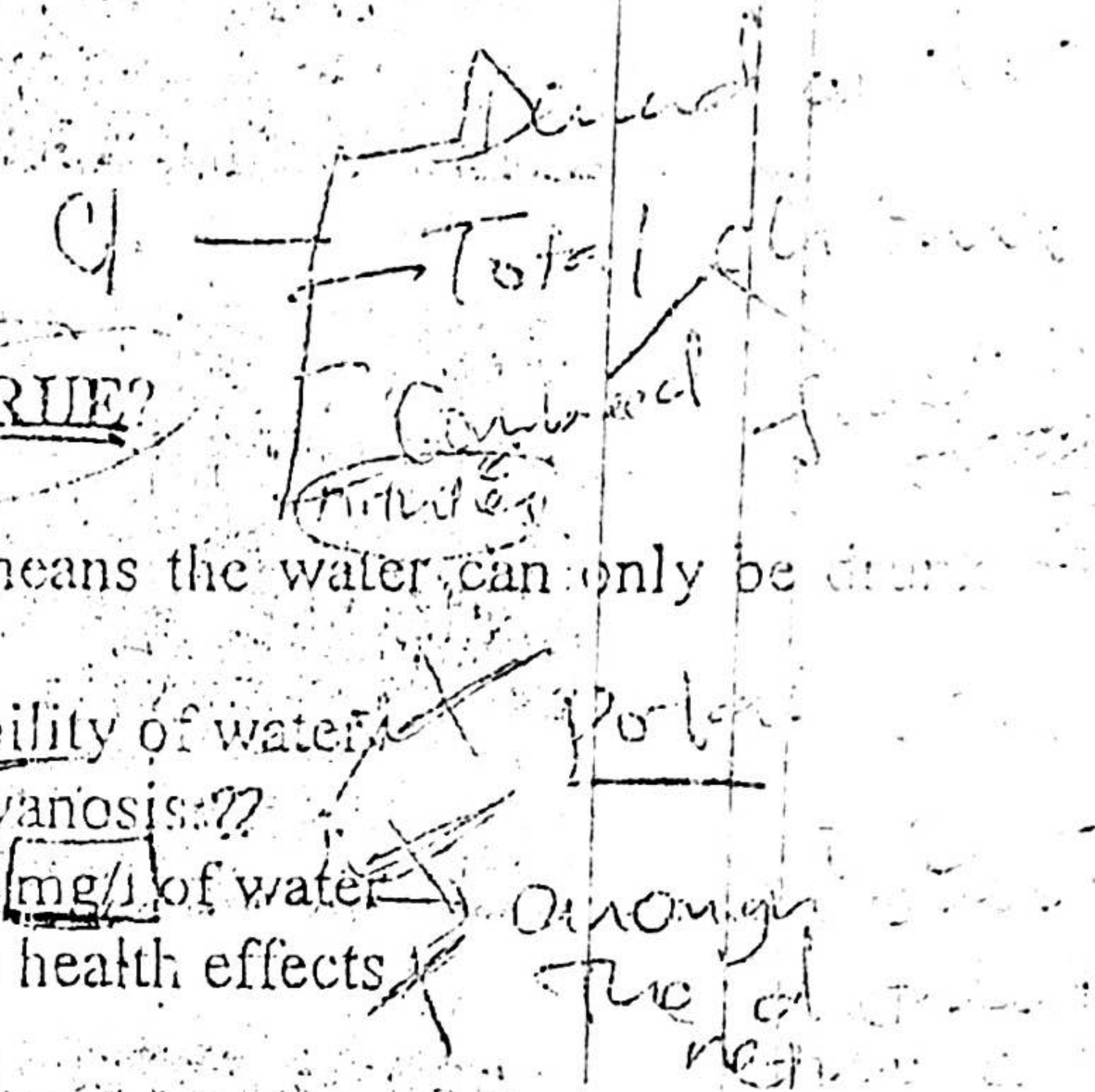
technical / operational

16. A single case of suspected botulism or mushroom poisoning warrants:

- (a) Vaccinating the cases ✓
- (b) Disengaging the procurement contract ??
- (c) Firing the food handlers ✗
- (d) Investigation
- (e) Surveillance

17. Which one among the following statements is TRUE?

- (a) Free residual chlorine in water treatment means the water can only be drunk after the chlorine has settled on reduced ✓
- (b) Free residual chlorine is a measure of portability of water ✗
- (c) Free residual chlorine may cause infantile cyanosis?? ✗
- (d) Free residual chlorine should not exceed 0.5 mg/l of water ✗
- (e) Free residual chlorine do not have long term health effects ✗



18. Which one of the following is TRUE?

- (a) Dioxins and furans are not by products of polythene and plastics
- (b) Incomplete combustion of polyvinyl chloride plastics produce furans and dioxins
- (c) Complete combustion of polyvinyl chloride plastics produce furans and dioxins
- (d) Chemical reaction of chlorine and water produces dioxins and furans
- (e) Dioxins and furans are not carcinogenic

19. Which of the following gases is NOT a "green house" gas?

- (a) Meterance Methane ?? ✓
 - (b) Chlorofluoro carbon ✓
 - (c) Carbon dioxide ✓
 - (d) Carbon monoxide ✗
 - (e) Water vapour ✓
- Handwritten notes for 19: CO₂, Methane, Nitrous Oxide, Ozone, Chlorofluoro Carbon.
- ① Water vapor
 - ② CO₂
 - ③ Methane
 - ④ Nitrous Oxide
 - ⑤ Ozone
 - ⑥ Chlorofluoro carbons
 - ⑦ Hydrofluoro carbons

20. The acceptable WHO standard of blood lead level is:

- (a) 4 ug/100mls of blood ✗
- (b) 40 ug/100 m's of blood ✓
- (c) 0.4 ug/100 m's of blood
- (d) 0.04 ug/100 mls of blood
- (e) 400 ug/100 mls of blood

21. One of the following statements is not TRUE about occupational diseases.

- (a) Most of them are preventable ✓
- (b) Most of them are treatable ✓
- (c) They are associated with chronic health effects ✓
- (d) Their manifestations are influenced by individuals susceptibility ✓
- (e) They are all non-communicable ✓

22. Which one of the following diseases is caused by exposure to coal dust C-8

- (a) Bagassosis moldy molasses
- (b) White lung diseases - asbestosis
- (c) Farmers lung disease - hay dust or mold spores, agricultural products
- (d) Black lung disease - coal ✓
- (e) Brown lung disease - byssinosis - hen.

23. Remedies to work-related accidents include all of the following except:

- (a) Accident and injury compensation ✓
- (b) Counselling on personal problem ✓
- (c) ~~Stricter shop floor supervision~~
- (d) Better job placement ✓
- (e) Training in safe working environment ✓

24. Which one of the following is an occupational disease common to cutters?

- (a) Eucephalopathy ✓
- (b) Bone malfunction ✓
- (c) Anaemia ✓
- (d) Silicosis ✓
- (e) Byssinosis ✓

25. Ergonomics is associated with all of the following except:

- (a) ~~Study of people at their workplace~~ people's efficiency ✓
- (b) Fitting the job to the employees ✓
- (c) Achieving maximum well-being for the worker ✓
- (d) Enhances employee productively ✓
- (e) Application of knowledge of human anatomy and psychology ✓

26. The percentage of women who are at risk of unintended pregnancy but not using contraceptives is referred to as:

- (a) Total fertility Rate
- (b) Total contraceptive Rate
- (c) Unmet need for Family Planning
- (d) Unmet need for Emergency Contraception
- (e) Contraceptive Prevalence Rate

27. Which of the following health sector documents defines Life Cycle cohorts?

- (a) KDHS
- (b) KEPH
- (c) KLCC
- (d) The Reproductive Health policy
- (e) The MCH Strategic Plan

28. Which of the following child mortality indicators do not have live births as its denominator?

- (a) Under-five mortality rate ✓
- (b) Child mortality rate ✓
- (c) Infant mortality rate ✓
- (d) Neonatal mortality rate ✓
- (e) Prenatal mortality rate

29. Under MDG5, Target 5B is to achieve by 2015:

- (a) Antenatal care coverage in urban slums
- (b) National contraceptive prevalence
- (c) Reduced adolescent birth rate
- (d) Universal access to reproductive health
- (e) Global family planning coverage

30. The Health Information System for growth monitoring programme in the child welfare clinics is referred to as:

- (a) DHIS II
- (b) NHIS
- (c) IMCI
- (d) CHANIS
- (e) MCHIS

Reg. No.:

31. If the sex ratio for country Y in 2012 was 105, then the proportion of female births would be:

- a) 1.05
- b) 0.92
- c) 0.512
- d) 0.488
- e) 0.244

$$\text{Sex ratio} = \frac{M}{F} \times 100$$

32. $\frac{\text{Total deaths due to cause Y in a year} \times 100,000}{\text{Total mid-year population in the year}}$

The above rate/ratio is referred to as:

- a) Age specific death rate
- b) Cause specific death ratio
- c) Crude death rate
- d) Cause specific death rate
- e) Maternal mortality rate

33. The crude death rate is a commonly used index of mortality because:

- a) It is the same for all populations \times
- b) It is a measure of life expectancy \times
- c) It is relatively easy to estimate with limited data \checkmark
- d) It gives the average age of death \times
- e) It is adjusted for age differences in cause of death

34. Which of the following statements about demographic transition theory is incorrect?

- a) Fertility declined before mortality \times *Mortality declines in transitional stage*
- b) Mortality declined before fertility \checkmark
- c) Mortality declined primarily due to improved hygiene and food production \checkmark
- d) The maximum rate of population growth never exceeded 1.5% p.a. in countries undergoing transition \checkmark
- e) Fertility decline brought about a decline in infant and child mortality. \checkmark

35. Which one of the following statements about micro theory of migration is incorrect?

- (a) Focuses on individual, family or household as the unit of analysis ✓
- (b) Focuses on motivations, choices and intentions of potential migrants. ✓
- (c) Attempts to integrate micro and macro factors of migration. ✗
- (d) Typically rely on individual level survey data. ✓
- (e) Focuses on information processing, networking and decision making among potential migrants.

36. Nutrition Interventions in maternal health sciences include all the following except:

- (a) Routine screening for anaemia ✓
- (b) Growth Monitoring ✓
- (c) Implementation of the 10 steps of baby friendly hospital Initiative ✓
- (d) Vitamin (B) Supplementation to mothers after delivery ✗

37. Which of the following variables is compulsory when collecting and computing any anthropometric set of data for children below the age of 5 years:

- (a) Weight
- (b) Age ✗
- (c) Mid-upper arm circumference ✓ 6-5y
- (d) Height
- (e) Sex

38. Which of the following best describes the nutritional indicator for assessing acute malnutrition in children below 5 years of age?

- (a) Weight-for-age
- (b) Height-for-age
- (c) Height-for-Weight
- (d) Weight-for-height ✓
- (e) BMI-for-age

39. International Code of Marketing of breastmilk substitutes does not prohibit

- (a) Distribution of Infant formular products to health personnel ✗
- (b) Promotion of bottle feeding for infants ✗
- (c) Distribution of free samples of infant formular ✗
- (d) Mothers choice to breastfeed ✓
- (e) Promotion of breast-milk substitutes ✗

Reg. No.:

40. Which of the following are underlying causes of childhood malnutrition in Kenya?

- a) Inadequate food intake, diseases *x - immediate*
- b) Poverty, poor government policies *x - Basic*
- c) Household food Insecurity, Poor Child care Practices *✓*
- d) Poverty, high population growth rate *- Basic*
- e) Inadequate land, poor agricultural practices *- basic*

41. The following are key components of a health management information systems except:

- a) Data collection tools *✓*
- b) Records department *✓*
- c) Procedures and protocols *✓*
- d) Hardware and software
- e) Personnel *✓*

42. A vision statement explains:

- a) Goals of an organisation
 - b) The purpose of an organisation
 - c) The identity of an organisation
 - d) The culture of an organisation
 - e) The procedures within the organisation
- Mission — reason for existence.*
vision → organizational it would appear in a future successful state.

43. The following are the functions of management according to the classic management school of thought except:

- a) Monitoring
 - b) Planning
 - c) Organizing
 - d) Leading
 - e) Controlling
- Planning → Organizing*
Controlling ← Leading

44. Leadership is about all the following except:

- a) Influencing people towards a vision *✓*
- b) Creating value *✓*
- c) Developing the mission of an organisation
- d) Effective communication *✓*
- e) Effective delegation *✓*

50. Culture refers to the following except:

- (a) Community Identity ✓
- (b) Beliefs and practices ✓
- (c) Community organization ✓
- (d) A shared value system ✓
- (e) Norms of African societies ?? not only African

51. The following were in the original elements of Primary Health care, except:

- (a) Clean water and sanitation ✓
- (b) Health education and dissemination ✓
- (c) Management of common illnesses ✓
- (d) Maternal health and immunisation ✓
- (e) Control of non communicable diseases

52. The Community Health Workers (CHW) are expected to meet the following criteria, except:

- (a) Belong to the community they serve ✓
- (b) Supported by the local health facility ✓
- (c) Supervised and answerable to village elders ?? xx voluntary
- (d) Link the community with health facility ✓
- (e) Attend community meetings ✓

53. The Community Health Strategy expects the following of CHWs, except

- (a) Receive payments from the community they serve voluntary
- (b) Accompany CHEW on home visits ✓
- (c) Attend community meetings ✓
- (d) Assess use of drugs at community level ✓
- (e) Work as volunteers basically ✓

54. The Kenya Ministry of Health expanded the original elements of PHC, as follows, except:

- (a) Mental and dental health ✓
- (b) Community based eye care ✓
- (c) Community based food production
- (d) Additional services at the local dispensary ✓
- (e) Improved essential drug kit ✓

55. The following are essential personnel in the Community Health Strategy, except:

- ✓ (a) Community Health extension workers ✓
- ✓ (b) Voluntary Community Health workers ✓
- Ⓓ ~~(c) Community Health Committee ?~~
- ~~(d) Facility based health committee~~
- ✓ (e) Retired/midwives living in community ✓

56. Communicating your health is responsibility of all the following except:

- (a) Fourth year medical students ✓
- (b) Consultants ✓
- Ⓒ ~~(c) Senior nursing officer exclusively~~
- (d) Public health officer ✓
- Ⓓ All of the above

57. Community health workers can and do all the following except:

- (a) Use persuasive skills to get pregnant women to attend ANC services ✓
- Ⓒ ~~(b) Create confusion at the community level ?? x~~
- (c) Bring those who have defaulted TB treatment back to the clinic ✓
- (d) Increase disease prevention networks ✓
- (e) Cause childhood immunizations schedule to be completed ✓

58. Tick the untrue statement below.

- ~~(a) It is mandatory to avoid sex in order to prevent STI's x~~
- (b) Anybody can get HIV ✓
- (c) Clergy have been known to contract HIV ✓
- (d) Hospital acquired infection does take place ✓
- Ⓒ (e) It is the responsibility of health care provider to protect patients from harm.

59. Optimal health can only be achieved because of all the following except:

- (a) Understanding sociology of the people
- (b) Community partnership in planning
- Ⓒ ~~(c) Choosing to apply principles of patient education only.~~
- (d) Applying total coverage of school health
- (e) Reaching out to community networks

60. The following will increase compliance of taking drugs in chronically ill patients except:

- Ⓒ (a) Making patients understand their particular disease at their level ✓
- ~~(b) Forcing patients to learn how to read and write before starting medication ??~~
- (c) Use of time or graphic to explain when to take the drugs ✓
- (d) Having support systems at home ✓
- (e) Being made to carry out return demonstration as applicable ✓

45. A project has the following characteristics except:

- (a) Specific objectives ✓
- (b) Specific budget ✓
- (c) Specific duration ✓
- ~~(d) Specific goal ✓~~
- (e) Specific area of operation

46. The application of the concept of vulnerability public health addresses the following except:

- (a) The physical environment ✓
- (b) Gender and health ✓
- (c) Access to services ✓
- ~~(d) Persons with disability only ✓~~
- (e) Persons in all age categories ✓

47. The relationship between Medical Anthropology and Epidemiology:

- ~~(a) Both advocate for supernatural treatment~~
- (b) Both apply similar methodologies
- ~~(c) Witchcraft is perceived as the major cause of ill health~~
- ~~(d) Both study the health of individual countries~~
- ~~(e) Lies in their reference to distribution of diseases~~

48. Health seeking behaviour is governed by the following except:

- ✓ (a) Social distance ✓
- ✓ (b) Physical distance ✓
- (c) Ability to pay for services ✓
- ~~(d) Decision making power at the health facility~~
- (e) the nature of reception by the service provider ✓

49. Socio-cultural factors are main area of focus in public health recognizing the following except:

- (a) The emphasis on disease prevention and health promotion ✓
- (b) Community engagement as critical in health service delivery ✓
- (c) Local context is central in disease occurrence and prevention ✓
- ~~(d) The lack of faith in modern medical approaches ??~~
- (e) The need to reduce the burden of disease to the health care system ✓