UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

(SECOND SEMESTER)

FINAL EXAMINATION PAPER
2008

COURSE CODE: NUR 521

COURSE TITLE: COMMUNITY HEALTH NURSING IV

TIME ALLOWED: 2 HOURS

MARKS ALLOCATED: 75

INSTRUCTIONS:

1 THIS PAPER CONTAINS THREE (3) COMPULSORY QUESTIONS.
2) ANSWER EACH QUESTION ON A SEPARATE SHEET OF PAPER.

PLEASE DO NOT OPEN THIS PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION 1A: Match each of the following epidemiological statements with the concept it best describes. For example 1 z

EPIDEMIOLOGY STATEMENTS	CONCEPTS
1 The study of the distribution of health and illness within the population and the factors that determine the population's health status.	a. Descriptive epidemiology
2 The study of the distribution of a given health state in a specified population in terms of person place and time	b epidemiology
3. Involves manipulation of exposure to the supposed causative factor and look for differences in the incidence of the supposed effect	c. case control
4. The client system affected by the particular condition under investigation	d. ecological
5 The primary cause of a health-related condition.	e. cohort
6. Consists of the all living organisms other than humans.	f. experimental
7. Factors related to social interactions that may contribute to health and illness	g. social environment
8 Involves comparisons between persons with a specific condition with without it	h. biological environment
9 Compares rates of disease occurrence among several population groups, usually 10 or more	i. host
10 The study of factors contributing to health states	j agent

Marks...[10]

QUESTION 1 B:

Epidemiology is the science which studies patterns of health and disease in communities and the factors which determine these patterns. Briefly discuss how each of the following factors influence health.

1   Cultural factors..[5]

2   Economic factors..[5]

3   Urban-rural differences..[5]

TOTAL MARKS...[25]

QUESTION 2

A   Following are imaginary population and vital statistics for Community X region for 1997.

Total mid year population	80,000
Population 45 years of age and over	20,000
Number of infants born alive	2000
Fetal deaths	32
Maternal deaths	1
Total deaths	648
Death under I year of age	42
Deaths of persons 45 years and over	300
From heart disease	98
From stroke	60
From all other causes	94

From the above data calculate the following indicators of health for Community X applying the usual constant (e.g 1000 or 10,000).

    a.   Crude birth rate.. ....[2]
    b.   Crude death rate... ......[2]
    c.   Infant mortality rate.. ....[2]
    d.   Fetal mortality rate.. .....[2]
    e.   Maternal mortality rate...[2]
    f.   Age specific death rate for persons 45 and over.........................[2]
    g.   Age- cause- specific death rate for those 45 and over for
          i.   heart disease ....[2]
          ii.   cancer..[2]

B   In 1999 Community X with a population of **114000** had **17** cases of acquired immuno deficiency syndrome (AIDS). During the same year Community Y with a population of **1,268,000** had **156** cases of AIDS diagnosed. Compare the rate of AIDS in each community and state why it is important to calculate rates instead of drawing conclusions from raw data..[4]

C Table 1 shows results from a study of the risk of falls in a 1000 bed acute care hospital during a 1 year period and age specific incidence rates of falls on all hospital services. Study the table and answer the following questions.

1. When falls were examined by service, which service department had the highest number of falls?..[1]
2. What conclusions can be drawn from data regarding age specific rate of falls per 10000 patient days..[4]

Table 1 Age specific rates for falls per 10,000 person days					
SERVICE					
Neuro/Psych department			Other clinical departments		
Age group	Falls	Rate	Age group	Falls	Rate
10-19	10	25	10-19	16	21
20-29	34	37	20-29	35	13
30-39	17	19	30-39	38	12
40-49	35	46	40-49	51	19
50-59	46	52	50-59	80	21
60-69	58	64	60-69	144	29
70-79	80	109	70-79	144	42
80+	21	150	80+	51	50

TOTAL MARKS...[25]

QUESTION 3

C. Briefly describe the importance of screening in public health……..………... [5]

D Surveillance is a fundamental role of public health. Discuss
   surveillance under the following headings:

   1) Active surveillance……………………………………….[10]
   2) Passive surveillance……………………..………………..[10]

TOTAL MARKS...**[25]**

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