# UNIVERSITY OF SWAZILAND FACULTY OF HEALTH SCIENCES

### **GENERAL NURSING DEPARTMENT**

# FINAL EXAMINATION PAPER SECOND SEMESTER

#### **MAY 2018**

**COURSE CODE: CHN 214** 

COURSE TITLE: EPIDEMIOLOGY & COMMUNICABLE DISEASES

TIME ALLOWED: 2 HOURS

**MARKS: 75** 

#### **INSTRUCTIONS:**

- 1. There are 3 questions in this paper
- 2. Answer all three questions
- 3. Each question is allocated 25 marks
- 4. Write legibly

THIS PAPER IS NOT TO BE OPENNED UNTIL THE INVIGILATOR HAS GRANTED PERMISSION

#### **QUESTION 1**

This question has two parts Part A consists of multiple choice questions and Part B consists of matching questions

#### **PART A: Multiple Choice Questions**

(1mark/point=25)

#### For the following multiple choice questions select the most correct answer e.g. 26. D

- 1. Incidence is defined as the occurrence of-----
  - A. New cases
  - B. Existing cases
  - C. Both
  - D. None of the above
- 2. The key ideas in the definition of incidence is/are
  - A. Measures new disease events in a candidate population
  - B. Specific amount of time that members are followed
  - C. All of the above
  - D. None of the above
- 3. The total number of deaths from all causes per 100,000 population per year is called?
  - A. Mortality rate
  - B. Crude mortality rate
  - C. Fatality rate
  - D. Case fatality rate
- 4. Which of the following is not a calculation used to compare measures of disease occurrences:
  - A. Ratios
  - B. Proportion
  - C. Rates
  - D. Dependency

- 5. Which of the following are the two basic measures of disease frequency in epidemiology are:
  - A. Incidence
  - B. Prevalence
  - C. Morbidity
  - D. Both A and C
- 6. Why are epidemiologist concerned with selecting particular study type?
  - A Depends on particular research questions
  - B Validity and efficiency issue
  - C Practical and ethical consideration
  - D All of the above
- 7. The following are limitations of a cross-sectional study, EXCEPT
  - A. Fairly easy to perform
  - B. Not useful to study disease etiology
  - C. Not suitable for study of rare diseases
  - D. No exception
- 8. Which epidemiological study compare groups and make inference about exposure outcome relationship?
  - A. Analytical epidemiology
  - B. Descriptive epidemiology
  - C. Both A&B
  - D. None of the above
- 9. What type of disease frequency measurement is used in a fixed population?
  - A. Cumulative incidence rate
  - B. Incidence rate
  - C. Both
  - D. None of the above

- 10. The VDRL, RPR or Wasserman tests are used to detect the presence of organisms causing:
  - A. Trichomoniasis
  - B. Syphilis
  - C. Gonorrhea
  - D. Candidiasis
- 11. The measure of the ability of an organism to produce severe pathological reaction is known as:
  - A. Infectivity
  - B. Virulence
  - C. Invasiveness
  - D. Toxicity
- 12. Interval between exposure to an infectious agent and appearance of first signs & symptoms is
  - A. Entry period
  - B. Incubation period
  - C. Quarantine period
  - D. Period of contact
- 13. Which among the following organisms does not indicate contamination of water by sewage or human excreta:
  - A. Coliform bacilli
  - B. Fecal streptococci
  - C. Clostridium botulism
  - D. Clostridium perfringes
- 14. Infant mortality is
  - A. Number of deaths of infants under one month of age
  - B. Number of deaths of infants under one year by 1000 total live births
  - C. Number of deaths of infants under one year of age in one calendar year by 1000 of total live births
  - D. Number of deaths of children under five in one calendar year

- 15. All of the following communicable diseases are caused by protozoal infection EXCEPT:
  - A. Bilharzias
  - B. Amoebic dysentery
  - C. Malaria
  - D. Trachoma

## **PART B: Matching questions**

Match the correct number on the left with a corresponding letter on the right e.g. 1. D

Causative agent	Disease
16. Varicella zoster virus	A. Diphtheria
17. Papilloma virus	B. Bacillary dysentery
18. Virus	C. Bilharzias
19. Vibrio cholera	D. Syphilis
20. Haemophilus ducreyi	E. Chicken pox
21. Influenza	F. Genital warts
22. Corynebacteriaum diphtheria	G. Chanchroid
23. Shigella Bacillus	H. Influenza virus
24. Treponema Pallidum	I. Cholera
25. Schistosoma hematobium	J. Mumps

Total marks = 25 marks

### **QUESTION 2**

Epidemiology is the study of the distribution and determinants of health related conditions and events in populations. Discuss epidemiology under the following subheading:

a) Five uses of epidemiology (2

(2marks/point=10)

b) Explain the process involved in the descriptive method of epidemiological

investigation

(2 marks/point=12)

c) Outline six factors affecting fertility in a population

 $(\frac{1}{2} \text{ mark/point} = 3)$ 

### Total Marks = 25 marks

#### **QUESTION 3**

Communicable diseases continue to be amongst the common health problems in Swaziland despite the measures put in place made to prevent and control them.

Discuss the following communicable diseases under the following subheadings:

a) Chain of infection of Listeriosis (1 mark/point=6)

b) Signs and Symptoms of Gonorrhea (1mark/point=5)

c) Four Risk factors for drug resistant Tuberculosis (1mark/point=4)

d) Primary prevention of Malaria (1mark/point=10)

Total marks = 25 marks