UNIVERSITY OF SWAZILAND

FACULTY OF HEALTH SCIENCES

GENERAL NURSING SCIENCE DEPARTMENT

FINAL EXAMINATION PAPER SECOND SEMESTER

MAY 2014

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

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PERMISSION TO DO SO

QUESTION 1

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

Part A: Matching questions

For the following questions match the correct number on the left with a corresponding letter on the right e.g. 1. D

Causative agent	Disease
1. Varicella zoster virus	A. Diphtheria
2. Papilloma virus	B. Bacillary dysentery
3. Virus	C. Bilharzias
4. Vibrio cholera	D. Syphilis
5. Haemophilus ducreyi	E. Chicken pox
6. Influenza	F. Genital warts
7. Corynebacteriaum diphtheriae	G. Chanchroid
8. Shigella bacillus	H. Influenza virus
9. Treponema pallidum	I. Cholera
10. Schistosoma hematobium	J. Mumps

Part B: Multiple Choice Questions

For the following multiple choice questions write the most appropriate response for your answer. Write the number and the letter representing the answer e.g. 26. E

11. The VDRL, RPR or Wasserman tests are used to detect the presence of organisms causing:

   A. Trichomoniasis

   B. Syphilis

   C. Gonorrhea

   D. Candidiasis

12. A gown should be worn when:

   A. The client's hygiene is poor

   B. The client has acquired immunodeficiency syndrome (AIDS) or hepatitis

   C. The nurse is assisting with medication administration

   D. Blood or body fluids may get on the nurse's clothing from a task the nurse plans to perform

13. The measure of the ability of an organism to produce severe pathological reaction is known as:
   A. Virulence

   B. Infectivity

   C. Invasiveness

   D. Toxicity

14. The number of new cases of a specific disease at a specified time X 1000 population at risk at that time is:
   A. Prevalence rate

   B. Point prevalence rate

   C. Morbidity rate

   D. Incidence rate

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15. Interval between exposure to an infectious agent and appearance of first signs and symptoms is:
    A. Entry period
    B. Incubation period
    C. Quarantine period
    D. Period of contact

16. Which of the following situations is an example of micro-organism transmission via droplet infection:
    A. Infected wound drainage contact nurse's hands
    B. A virus transmitted through sexual contact
    C. Microorganisms contact a person's nasal mucus when someone coughs nearby
    D. A contaminated stethoscope touches the skin of a client

17. Micro-organisms are transmitted to a client when a contaminated stethoscope touches his skin. The stethoscope is a:
    A. Fomite
    B. Portal of exit
    C. Portal of entry
    D. Reservoir

18. What is the single most effective method by which the nurse can break the chain of infection?
    A. Give all clients antibiotics.
    B. Wear gloves when caring for all clients.
    C. Wash hands between procedures and clients.
    D. Make sure housekeeping staff are using the right chemicals.

19. Which among the following organisms does not indicate contamination of water by sewage or human excreta:

   A. Coliform bacilli
   B. Fecal streptococci
   C. Clostridium perfringes
   D. Clostridium botulism

20. This type of statistic deals with births, marriages, and deaths:

   A. Biostatistics

   B. Health statistics

   C. Vital statistics

   D. Monthly statistics

21. Infant mortality is:

   A. Number of deaths of infants under one month of age

   B. Number of deaths of infants under one year of age in one calendar year by 10,000 of total live births

   C. Number of deaths of infants under one year of age in one calendar year by 1000 total live births

   D. Number of deaths of children under five in one calendar year

22. Because it involves dire manipulation of subjects it is carried out with animals:

   A. Descriptive studies

   B. Analytical studies

   C. Experimental studies

   D. Cohort studies

23. All of the following communicable diseases are caused by protozoal infection **EXCEPT**:

   A. Bilharzias

   B. Amoebic dysentery

   C. Malaria

   D. Trachoma

24. The following diseases can be transmitted by the skin and mucous membrane **EXCEPT:**
    A. Diphtheria
    B. Rabies
    C. Malaria
    D. Impetigo

25. Restriction of activities of well persons or animals who have been exposed to a case of communicable diseases during the period of communicability, best describes:
    A. Incubation period
    B. Quarantine
    C. Period of contact
    D. Entry period

Total = 25 Marks

QUESTION 2

Epidemiology is the study of the distribution and determinants of health related conditions and events in populations. Respond to the questions below under the following subheadings:

a) Describe five (5) uses of epidemiology giving an example for each   (10)

b) Explain the process involved in the descriptive method of epidemiological investigation relating this to Typhoid Fever   (12)

c) Mention six factors affecting fertility in a population   (3)

Total = 25 Marks

QUESTION 3

The prevalence of sexually transmitted infections is high in the developing countries. The SADC region has recognized this problem and thus developed an STI framework for all SADC countries to adopt in order to address this problem uniformly and hopefully resulting in control the spread. Gonorrhea is among these diseases that should be addressed.

Using the following:

a) Describe the chain of infection for gonorrhea   (6)

b) State Complications occurring as a result of gonorrhea giving three examples that affect males and three that females   (3)

c) Discuss the primary prevention of Gonorrhea   (16)

Total = 25 Marks