

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
GENERAL NURSING SCIENCE DEPARTMENT
FINAL EXAMINATION PAPER SECOND SEMESTER
MAY 2019

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**

QUESTION 1

For all the following multiple choice questions only write the number and corresponding answer e.g. 27. B.

1. Clinical trials are studies that are included in:
 - A. Experimental studies
 - B. Ecological studies
 - C. Cohort
 - D. Cross-sectional studies

2. The following are uses of cross-sectional survey EXCEPT:
 - A. Estimates prevalence of disease or their risk factors
 - B. Generate hypotheses
 - C. Investigates the etiology of disease
 - D. Examine evolving trends

3. ----- is the proportion of total population that is diseased.
 - A. Incidence
 - B. Prevalence
 - C. Specific morbidity rate
 - D. None of the above

4. The following diseases are droplet-born EXCEPT:
 - A. Encephalitis
 - B. Dengue fever
 - C. Influenza
 - D. Measles

5. 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

6. Koplik's spots are a clinical sign of which vaccine preventable disease?
- A. Pertussis
 - B. Hepatitis B
 - C. Measles
 - D. Pneumonia
7. Molluscicide is a chemical used in the prevention of which of the following disease
- A. Bilharzia
 - B. Malaria
 - C. Rabies
 - D. Tetanus
8. In which one of the following circumstances will the prevalence of a disease in the population increase, all else being constant?
- A. If the incidence rate of the disease falls.
 - B. If recovery of the disease is faster.
 - C. If survival time with the disease increases.
 - D. If the population in which the disease is measured increases.
9. Taeniasis is a form of tapeworm infection. Among the listed below tapeworms commonly infect humans. Which one is the beef tapeworm?
- A. Taenia solium
 - B. Taenia saginata
 - C. Diphyllbothrium lattum
 - D. T. Gondii
10. The following microorganisms can be transmitted through the skin and mucous membrane EXCEPT:
- A. Schistosoma
 - B. Mycobacterium leprae
 - C. Chlamydia trachomatis
 - D. Clostridium Botulinum

11. Which among the following micro-organisms may not play a part in the transmission of diseases related to the gastrointestinal tract?
- A. Salmonella
 - B. Shigella
 - C. Bordetella pertussis
 - D. Schistosoma
12. If a child after receiving BCG vaccine does not develop a blister on the injection site, how long should the nurse wait before giving a repeat dose of the BCG
- A. 6 weeks
 - B. 4 weeks
 - C. 12 weeks
 - D. 2 weeks
13. ALL of the following are bacterial diseases EXCEPT:
- A. Amoebic dysentery
 - B. Lymphogranulom Venerium
 - C. Tuberculosis
 - D. Typhoid fever
14. In an epidemiological context, what is the population at risk?
- A. The proportion of a population that engage in risky behaviours.
 - B. A group of people participating in a study that may be harmful to them
 - C. The group of people that may experience the outcome we want to study.
 - D. The population group with the highest relative risk of disease.
15. Which among the following diseases are insect-borne?
- A. Dengue fever
 - B. Rift-Valley fever
 - C. Malaria
 - D. Typhoid fever

For the following True or False statements only write True if it is correct or False if it is false

16. Testing hypothesis about causal relationships is the purpose of analytical epidemiology.
17. Cohort studies usually examine multiple health effects of an exposure; subjects are defined according to their exposure levels and followed for disease occurrence.
18. Case series refers to a detailed presentation of a single case especially when the disease may be new or unfamiliar.
19. Descriptive epidemiology: focuses on the determinants of disease in a given population.

Question 20-25: Match the following diseases and their causative agents and only write the corresponding correct letter e.g. 26. H

Communicable disease	Causative agent
20. Impetigo	A. Plasmodium Falciparum
21. Chicken pox	B. Streptococcus pyogenes
22. Syphilis	C. Shigella sonnei, flexneri
23. Whooping cough	D. Varicella virus
24. Malaria	E. Treponema pallidum
25. Bacillary Dysentery	F. Bordetella pertussis

QUESTION 2

Describe each of the following epidemiological concepts:

- a) The person, place and time relationship concept of epidemiology (9 marks)
- b) Five routes of disease transmission and give one examples of a disease transmitted in each (10 marks)
- c) Six steps of responding to an outbreak using Measles as an example throughout all the steps (6marks)

Total =25 marks

QUESTION 3

Due to the considerable rainfall experienced in the recent rainy season in the Kingdom of Eswatini in 2019, possible disease outbreaks were anticipated especially diarrhoeal diseases.

Under the following headings:

- a) Explain the Chain of infection using Cholera as an example (6 marks)
- b) Describe seven (7) Primary prevention actions for diseases transmitted through the fecal-oral route (14 marks)
- c) Mention ten (10) actions/steps implemented in generally in secondary disease prevention among communicable diseases (5 marks)

Total = 25 marks