

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE  
OF BACHELOR OF SCIENCE IN NURSING**

**NURS 375: INFECTIOUS AND VECTOR-BORNE DISEASES**

**STREAMS: BSC. NURSING (Y3S1)**

**TIME: 3 HOURS**

**DAY/DATE: WEDNESDAY 07/07/2021**

**08.30 A.M. – 11.30 A.M.**

**INSTRUCTIONS:**

- Do not write anything on the question paper.
- Mobile phones and any other reference materials are NOT allowed in the examination room.
- The paper has THREE sections. Answer ALL questions.
- Answers for SECTION I should be on first page of the answer booklet.
- Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet

**Part I: MCQS (20 marks)**

1. The following is true about abortive poliomyelitis
  - a. Non-specific type of illness with brief influenza like symptoms during polio epidemic
  - b. There is spontaneous pain on the back and sometimes on the abdomen
  - c. The patient may have difficulties in passing urine
  - d. There may be muscle fasciculation
2. The following host factors are significant in the spread of influenza EXCEPT
  - a. Extremes of age
  - b. Human mobility
  - c. Change in weather conditions
  - d. Occupation

3. Which of the following statements about the Avian flu is most accurate?
  - a. Most Avian influenza viruses infect humans
  - b. It has pandemic potential
  - c. It is endemic
  - d. Controlling the disease in humans is the first step in prevention
4. A disease is pandemic if
  - a. Many persons acquire it over a short period
  - b. Is always present in a population
  - c. Occurs occasionally in a population
  - d. Arises from a single definable source and affects many people
5. The organism that causes chancroid is
  - a. *Treponema pallidum*
  - b. *Haemophilus ducreyi*
  - c. *Chlamydia trachomatis*
  - d. *Lymphogranuloma venerium*
6. Category 1TB patients include those who
  - a. Are newly diagnosed, have never been treated for PTB, are smear positive
  - b. Have been previously treated for PTB, relapse cases, are smear positive
  - c. Have been previously treated for PTB, default cases, are smear negative
  - d. Have been previously diagnosed, treatment failures, are smear negative
7. Zoonotic diseases include:
  - a. Brucellosis, amoebiasis and anthrax
  - b. Brucellosis, anthrax and rabies
  - c. Anthrax, rabies and SARS
  - d. Anthrax, tetanus and Avian flu
8. Which of the following is an enzoonotic disease?
  - a. Hydatidosis
  - b. Teaniasis
  - c. Amoebiasis
  - d. Filariasis

9. Prepatent period is
- Period in susceptible host between entry of infectious agent and onset of initial symptoms
  - Period in susceptible host between exit of infectious agent and detection of the same in the vector
  - Period from onset of symptoms to recovery
  - Period in susceptible host between entry of infectious agent and detection of the same in blood
10. An example of a communicable disease that has transovarian transmission is
- Yellow fever
  - Bacillary dysentery
  - Schistosomiasis
  - Teniasis
11. Malignant tertian malaria is caused by
- Plasmodium vivax*
  - Plasmodium ovale*
  - Plasmodium malariae*
  - Plasmodium falciparum*
12. Scabies infection of the skin caused by *Sarcoptes scabie* is an example of
- water borne disease
  - water washed disease
  - water based disease
  - water related disease
13. An outbreak of jaundice occurs in several children who attend the same day care centre. If the outbreak was caused by a virus, which of the following is the most likely cause?
- Hepatitis A
  - Hepatitis B
  - Hepatitis C
  - Hepatitis D
14. Each of the following statements is correct EXCEPT
- Mumps virus is a single stranded RNA genome

- b. Meningitis is a recognized complication of mumps
  - c. Mumps orchitis in children before puberty causes sterility
  - d. During mumps the virus spread through bloodstream to various internal organs
15. Which of the following statements is CORRECT about poliovirus?
- a. Congenital infection of the fetus is an important complication
  - b. The virus replicates extensively within the gastrointestinal tract
  - c. A skin test is used to determine prior exposure
  - d. Retroviral therapy shortens the duration of infection
16. The sum total of body mechanisms that interpose barriers to the invasion or multiplication of infectious agents, or to damage by their toxic products is called
- a. Innate immunity
  - b. Resistance
  - c. Transmissibility
  - d. Herd immunity
17. The following are objectives of disease surveillance. Which one is NOT?
- a. Provide information on disease trends
  - b. Provide feedback
  - c. Provide early warning
  - d. Restrict movement of carriers
18. Which of the following is NOT a contact disease?
- a. Cholera
  - b. Acute bacterial conjunctivitis
  - c. Pediculosis
  - d. Tinea capitis
19. The disease transmitted by the vector *Xenophyila philorexa* and *Xenophyila brasiliensis* is:
- a. Yellow fever
  - b. Trypanosomiasis
  - c. Plague
  - d. Leishmaniasis
20. A protozoal infection which the gastro-intestinal tract is the portal of entry is

- a. Anthrax
- b. Botulism
- c. Giardiasis
- d. Taeniasis

**Part II: SHORT ANSWER QUESTIONS (40 marks)**

1. Using the six links of communicable diseases, describe the prevention and control of measles (9 marks)
2. State six (6) factors that promote development and spread of communicable diseases (4 marks)
3. Describe any 3 components in cholera outbreak control program (6 marks)
4. State five (5) environmental factors that favor the spread of polio (5 marks)
5. Using the epidemiological triangle, describe prevention and control program for pulmonary tuberculosis (6 marks)
6. Describe five (5) approaches that can be adopted in prevention and control of yellow fever (5 marks)
7. Describe the syndromic management of male urethral discharge. (5 marks)

**Part III: LONG ANSWER QUESTION (40 marks)**

1. In June 2019 there were concerns that there was a case of ebola in the Kenyan rift valley.
  - a. List four (4) signs and symptoms of hemorrhagic fevers (4 marks)
  - b. Using Leavell's Levels of Prevention, describe the measures you will put in place for ebola control and prevention program (16 marks)
2. With examples, describe the prevention and control of zoonotic diseases using epidemiologic triad perspective (20 marks)

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