

015/23

**The West Bengal University of Health Sciences**  
**MBBS 3rd Professional Part-I Examination (New Regulation)**  
**April - May 2023**

Subject : Community Medicine

Full Marks : 100

Paper : I

Time : 3 hours

*Attempt all questions. The figures in the margin indicate full marks.*

1. a) A 10 year old boy has experienced scratching by a street cat on his left leg with oozing of scanty blood. His mother washed the wound casually using water stored in a bucket. The wound has been dressed along with Inj.Tetanus toxoid, administered by a local practitioner who referred him to emergency department of a Medical College and Hospital for anti-rabies vaccine. Write down the line of management for this boy in present situation. Describe the preventive measures for controlling the disease. 10+5  
  
b) What is 'carcinoma in situ'? Mention its importance. How is the screening of cervical cancer done at community level? Enumerate the risk factors for cervical cancer. 2+4+5+4
2. a) Enumerate the determinants of health. How environmental and socio-economic conditions act as determinants of health in a community? 4+3+3  
b) Name the different types of biomedical wastes generated in your hospital. Write the measures for their disposal as per national rules. 3+7  
c) How epidemiological studies are classified? Briefly describe the steps of case control study to find out the association between lung cancer and smoking. 4+6
3. Write short notes on the following: 2 x 5  
a) Graphical representation of statistical data.  
b) Explain the role of 'Doctor-patient relationship' in community setting.
4. Explain the following statements: 5 x 4  
a) Pneumococcal conjugate vaccine has been incorporated in NIS.  
b) Natural history of disease is best established by cohort study.  
c) Community diagnosis is the first step towards community health action.  
d) Monitoring and surveillance is different in public health.  
e) Zinc is important in treatment of diarrhoea.
5. Choose the correct option for each of the following: 10x1  
i) In a community survey, it is found that the prevalence of a disease has been increased from its value determined by a baseline study. What attribute of a screening test is likely to be affected most?  
a) Specificity b) Sensitivity c) Positive predictive value d) Negative predictive value

**P.T.O**

ii) A survey is being planned to be conducted in Urban Health Training Centre (UHTC) of a medical college. In preparatory phase, the investigators are discussing to control the inter-observer error. Finally, they decided to reduce it by all of the following methods except:

- (a) Repeating measurement over time      b) Standardization of procedure of measurement  
c) Stringent training of surveyors      (d) Using two or more observers for independent assessment

iii) Which one of the following is false about Epidemic?

- a) It is the unusual occurrence of a disease/health related states/events.  
b) It's frequency clearly exceeds the normal 'expected occurrence'.  
c) It's occurrence crosses the 'epidemic threshold' for that disease/health event.  
d) 'Epidemic threshold' is two standard deviation from the endemic frequency.

iv) Which of the following is the foundation of vital statistics

- a) Census    b) Registration of vital events      c) Sample registration system  
d) Notification of diseases

(v) Which one of the following is NOT true about inactivated vaccine?

- a) It can stimulate active immunity when injected.  
b) It is safer than the live attenuated vaccine.  
c) It requires booster doses for maintaining immunity.  
(d) It is affected by circulating antibody against the disease.

vi) A doctor is required to study the incidence of 'Byssinosis' in a cotton textile industry. Which study design should he choose?

- a) Cross-sectional    b) Longitudinal      c) Ecological survey      d) Case reports

vii) Specificity of a screening test was found to be 80%. Specificity is the ability of the test to detect

- a) Negative result in those who have the disease.  
b) Positive result in those who have the disease.  
c) Negative result in those who have no disease.  
d) Positive result in those who have no disease.

viii) Causative agent of an infectious disease is present in the environment, but there is no transmission of the agent. This is known as

- (a) Elimination      b) Control      c) Eradication      d) Holoendemic

ix) After having grand dinner in a hostel, a number of students were reported to be suffering from pain abdomen, diarrhea and vomiting. Most cases occurred within 8 to 10 hours after dinner, This is an example of.

- a) Common source single exposure epidemic      b) Slow epidemic  
c) Common source multiple exposure epidemic      d) Propagated epidemic

x) A cheap method of sewage treatment is 'Oxidation pond'. It works on

- a) Aerobic principle during night and anaerobic during daytime.  
b) Aerobic principle during daytime and anaerobic during night.  
c) Aerobic principle in both daytime and night.  
d) Anaerobic principle in both daytime and night.