

M.B.B.S. THIRD PROFESSIONAL PART-I EXAMINATION, JANUARY-2025**COMMUNITY MEDICINE****PAPER - FIRST****[Time allotted: Three hours]****SET-A****[Max. Marks: 100]****Q. 1. Multiple choice questions (Darken the single best response in OMR sheet. Time allotted 20 minutes) (20 x 1 = 20)**

1. Who was the pioneer of social medicine?
 - a. Alfred Grotjahn
 - b. Robert Koch
 - c. Joseph Bhole
 - d. CEA Winslow
2. In the wheel model of disease, the central hub of the wheel denotes
 - a. Physical Environment
 - b. Biological Environment
 - c. Chemical Environment
 - d. Genetic Factors
3. A person's serological testing shows positivity for HBsAg, HBeAg and IgG anti-HBc, but no detectable antiHBs or anti-HBe. The patient has
 - a. Acute Hepatitis B
 - b. Completely recovered from HBV infection
 - c. Chronic active hepatitis
 - d. Vaccination followed by immunity to Hepatitis B
4. Haddon's Matrix is a model used for explaining the epidemiology and prevention of
 - a. IHD
 - b. Tuberculosis
 - c. Road Traffic Accidents
 - d. Maternal and Child Health Problems
5. Which of the following is an example of major mental health disorder?
 - a. Neurosis
 - b. Psychoneurosis
 - c. Personality Disorder
 - d. Paranoia
6. To answer the question "whether in patients with septicaemia, does sudden decline in TLC to $<3000/\text{mm}^3$ indicate grave prognosis for death in next 24 hrs" the appropriate study design will be
 - a. Clinical Trial
 - b. Cohort Study
 - c. Case Control Study
 - d. Descriptive study
7. Different interpretations of an X ray by two radiologists is an example of
 - a. Sensitivity
 - b. Biological variation
 - c. Predictive accuracy
 - d. Inter observer variation
8. In triage, high priority patients are denoted with which colour?
 - a. Red
 - b. Blue
 - c. Green
 - d. Black
9. Definitive host for malarial parasite is
 - a. Human
 - b. Pig
 - c. Mosquito
 - d. Both Human and mosquito
10. A randomized trial comparing the efficacy of two drugs showed a difference between the two ($p < 0.05$). Assume that in reality, however, the two drugs do not differ. This is, therefore, an example
 - a. Type I error
 - b. Type II error
 - c. Both
 - d. None
11. In the term "cVDPV", "c" is
 - a. Community
 - b. Circulating
 - c. Complex
 - d. Cumulative
12. The hallmark feature of an analytic epidemiologic study is
 - a. Use of an appropriate comparison group
 - b. Laboratory confirmation of the diagnosis
 - c. Publication in a peer-reviewed journal
 - d. Statistical analysis using logistic regression
13. Periodic examination of industrial workers is an example of
 - a. Primordial Prevention
 - b. Primary Prevention
 - c. Secondary Prevention
 - d. Tertiary Prevention
14. Herpes zoster occurring after many years of chickenpox infection is an example of
 - a. Subclinical Infection
 - b. Re-infection
 - c. Latent Infection
 - d. Hypersensitivity
15. What has been the change in the epidemiology of Diphtheria in India
 - a. More affecting older children and adults
 - b. More fatal
 - c. Less transmission potential
 - d. All of the above
16. DASH stands for
 - a. Dietary allowance of salt in hypertension
 - b. Dietary approaches to stop hypertension
 - c. Diet and salt in hypertension
 - d. Diabetes, atherosclerosis, stress and hypertension
17. What are the variables whose calculation is done according to the weight, height, and length known as?
 - a. Flowchart variables
 - b. Discrete variables
 - c. Measuring variables
 - d. Continuous variables
18. The term "Limeys" is associated with
 - a. A Clinical Trial
 - b. Social Marketing
 - c. Health Economics
 - d. Water Purification
19. Progressive Massive Fibrosis of the lungs is a feature of
 - a. Anthracosis
 - b. Silicosis
 - c. Asbestosis
 - d. Byssinosis
20. The time elapsing between the entry of an infectious agent in the body and the maximum infectivity is called
 - a. Incubation period
 - b. Generation Time
 - c. Quarantine Period
 - d. Isolation period

COMMUNITY MEDICINE PAPER – FIRST

Note: Attempt all questions in sequence.
Draw suitable diagrams wherever necessary.

- Q. 2. Give reasons why:** (5 x 2 = 10)
- The Epidemiological Triad Theory is not able to explain causation of NCDs.
 - A low basic reproduction number represents ultimate extinction of a disease.
 - There is a plan for eventual withdrawal of OPV
 - An epidemiological transition ratio of <0.5 denotes poor lifestyle of a country
 - Community Psychiatry can play a distinct role in mental health management
- Q. 3. Problem based question:** (2+2+3+3 = 10)
- Suraj, a 36 year old diabetic laborer, visits your PHC with complaints of persistent and productive cough and low grade fever since one month. He is a chronic smoker and recently experienced flecks of blood in his sputum.
- What is the probable diagnosis and why was Suraj at a higher risk?
 - Draw a diagnostic algorithm for Suraj.
 - Mention the national health program for this condition and explain its strategic pillars.
 - How will you manage this case?
- Q. 4. Write Briefly on:** (4 x 6 = 24)
- Family Life Cycle
 - Natural history of disease
 - Steps in investigation of an outbreak
 - Various technologies for treatment of biomedical waste
- Q. 5. Structured question:**
- (i) Explain diagrammatically the epidemiological triad of diarrheal disease in children. How is Plan A for diarrhea management conducted at home? What are the different interventions under Diarrheal Disease Control Program? (3+3+4 = 10)
- (ii) What is syndrome X? Classify Diabetes Mellitus and explain its risk factors. What are the packages of services under National Programme for Prevention and Control of Non-Communicable Diseases? (1+2+4+3 = 10)
- Q. 6. Answer as indicated:** (4 x 4 = 16)
- Evaluation of a screening test
 - Hill's Criteria of Causality
 - Measures of central tendency
 - Prevention of occupational diseases in health care providers
