

Madhya Pradesh Medical Science University, Jabalpur MBBS Final Part-I Professional Examination - Jan-2023 Subject: Preventive and Social Medicine Paper I Paper Code: 23BM0000100541

Instructions:

- a) All questions are compulsory
- b) Draw diagrams wherever necessary
- c) Answers of Questions and Sub-questions must be written strictly according to the serial order of the question paper
- d) MCQs have to be answered in the theory answer book
- e) Please write MCQ answers neatly and in serial order with black or blue pen in brackets for example: 1. (a)
- f) MCQs have to be answered only once; any repetition, cutting, erasing, or use of whitener will be considered malpractice. Such answers will not be counted and action will be taken as per UFM rules of the
- g) Subjective answers should be answered in up to 30 words per mark. For example, a 2-mark answer should be answered in up to 60 words.

Time: 3:00 Hours Maximum Marks: 60

Q.1 Total MCQs: 20 $20 \times 1/2 = 10$

- MM.FirstRanker.com 1. All of the following are determinants for the essential components to calculate Physical Quality of Life Index (PQLI) except:
 - a) Infant mortality rate
 - b) Life expectancy at age one year
 - c) Basic literacy rate in population
 - d) Life expectancy at birth
- 2. Which is the best index for burden of disease?
 - a) Case fatality rate
 - b) Disability adjusted life years
 - c) Dependency ratio
 - d) Morbidity data
- True about prevalence:
 - a) It is a ratio
 - b) Prevalence rate is the ideal measure for studying disease etiology or causation
 - c) Increases with increase in duration of disease
 - d) Decreases with decrease in case fatality
- 4. Which one of the following is an index of communicability of an infection?
 - a) Carrier rate
 - b) Prevalence rate
 - c) Secondary attack rate
 - d) Primary attack rate
- About secular trend, true is:
 - a) Changes are seen periodically
 - b) Affected by environmental conditions
 - c) Changes occur over decades in a particular direction
 - d) Vector dynamics is important





- Current smokers are at higher risk of developing lung cancer as compared to ex-smokers; criticality of causality satisfied here is:
 - a) Temporal relationship
 - b) Consistency
 - c) Strength of association
 - d) Reversibility or reversible association
- 7. Period between the possible time of detection and the actual time of diagnosis is:
 - a) Lead time
 - b) Screening time
 - c) Generation time
 - d) Serial interval
- Window period for HIV is
 - a) 3-12 weeks
 - b) 8-20 weeks
 - c) 6-20 weeks
 - d) 10-20 weeks
- In measles Koplik spot is seen in:
 - a) Prodromal stage
 - b) Incubation
 - c) Eruptive stage
 - d) Convalescent stage
- 10. Dehydration in a child with diarrhoea, thirst present, tears absent is:
 - a) Milo
 - b) Moderate
 - c) Severe
 - d) None
- 11. Disinfecting action of chlorine on water is mainly due to:
 - a) Hydrogen chloride
 - b) Hypochlorous acid
 - c) Hypochlorite ions
 - d) Hydrogen ions
- 12. When total number of deaths due to measles is presented in relation to the total cases of measles, it is best labeled as:
 - a) Cause specific death rate
 - b) Case fatality rate
 - c) Incidence rate
 - d) Proportional mortality
- 13. The commonest physical health hazard in most industries is:
 - a) Heat
 - b) Noise
 - c) Humidity
 - d) Ionizing radiation
- 14. The most commonly described anomalies associated with congenital rubella include all the following except:
 - a) Cataracts
 - b) Sensorineural deafness
 - c) Microcephaly
 - d) Patent ductus arteriosus
- 15. Herd immunity is commonly seen in one of the following diseases:
 - a) Poliomyelitis
 - b) Leprosy





- c) Malaria
- d) HIV
- ASHA (Accredited Social Health Activist) works at
 - a) Community level
 - b) Village level
 - c) PHC
 - d) District level
- 17. Nalgonda technique is used in
 - a) Endemic fluorosis
 - b) Epidemic dropsy
 - c) Endemic ascites
 - d) Neurolathyrism
- The Biological Oxygen Demand indicates
 - a) Organic matter
 - b) Bacteria content
 - c) Anaerobic bacteria
 - d) Chemicals
- Incidence is calculated by
 - a) Retrospective study
 - b) Prospective study
 - c) Cross sectional study
 - d) Random study
- 20. Schick test does not indicate:
 - a) Immunity to diphtheria
 - b) Susceptibility to diphtheria
 - c) Hypersensitivity to diphtheria
 - d) Carrier of diphtheria

Q.2 Long Answer Questions $(4 \times 5 = 20)$

- a. What is analytical epidemiology? Describe the steps involved in case-control studies.
- b. Discuss epidemiology and control of malaria in India.
- c. Steps of investigating an Epidemic.
- d. Discuss concept of prevention, explaining levels of prevention and modes of intervention giving examples of each.

Q.3 Short Answer Questions $(4 \times 3 = 12)$

- Web of causation of disease.
- b. Cold chain system.
- Validity of screening test.
- d. Provision of health-related benefits under employees' state insurance Acts.

Q.4 Very Short Answer Questions (9 x 2 = 18)

- a. Social security
- b. Superchlorination
- c. Quarantine
- d. Dengue shock syndrome
- e. Post exposure prophylaxis for HIV





- f. National immunization schedule
- g. In the medical OPD of teaching hospital of Medical College, diastolic blood pressures of 10 patients were as follows: 80, 75, 81, 79, 71, 95, 75, 77, 84 & 90. Calculate Mean
- Vaccines for prevention of rabies.
- i. What are the modifiable risk factors for hypertension.



