

**Q. 1. Multiple choice questions (Darken the single best response in OMR sheet. Time allotted 25 minutes)****(0.5 x 24 = 12)**

1. A radiotherapist prescribes a new drug combination of chemotherapy and immunotherapy for metastatic melanoma. It prolongs the survival but does not cure cancer. Which of the following is true in this situation?
  - a. Incidence reduces and prevalence increases
  - b. Incidence remains the same and prevalence increases
  - c. Incidence reduces and prevalence remains the same
  - d. Incidence increases and prevalence reduces
2. Ratio of incidence of a disease among the exposed to the incidence among non-exposed is:
  - a. Risk ratio
  - b. Odds ratio
  - c. Attributable risk
  - d. Absolute risk
3. A study was done in 3 states to see the mean blood pressure in each community. Health workers were assigned and they visited each house in the three communities. Mean blood pressure in each community was found and compared. What type of study design is represented here?
  - a. Cohort study
  - b. Case control study
  - c. Cross – sectional study
  - d. Field trial
4. All of the following statements concerning meta-analysis are **true except**:
  - a. A study in which units of analysis are populations or groups, rather than individual.
  - b. Used to enhance the statistical power of research studies where number in studies available are too small.
  - c. Is applied by pooling results of small, randomized control trials when no single trial has large enough numbers to reach a statistical significance.
  - d. It combines results from different studies to obtain a numerical estimate of overall effect.
5. While comparing two diagnostic tests, computerized tomography (CT) and radionuclide (RN) scanning to detect brain tumor it was seen that, at 90% sensitivity the CT scan gives 5% false positives and the RN scan gives 50% false positives. It can be said that:
  - a. The ROC curve for CT scan will be on the right of ROC for the RN scan.
  - b. The ROC curve for RN scan will be on the right of ROC for the CT scan.
  - c. For the lower false positive rate, RN scan will have a higher sensitivity.
  - d. For a given false positivity rate, CT scan will have lower positive predictive value
6. When 2 screening tests are done in series, then there is:
  - a. Increased sensitivity and decreased specificity
  - b. Increased specificity and decreased sensitivity
  - c. Increased sensitivity and increased specificity
  - d. Decreased sensitivity and decreased specificity.
7. The services of Suraksha clinic are related to:
  - a. Acute diarrhoeal disease
  - b. Acute respiratory disease
  - c. Family Planning
  - d. STI/RTI
8. National strategic plan for TB control (2012 – 17) includes all **except**:
  - a. Finding TB HIV positive cases.
  - b. Reduction in default case to < 10% for new case and < 5% reinfection cases
  - c. Incentives to ASHA on treatment completion by patients
  - d. Benefit to patient treated in private hospital.
9. Who is known as father of immunology?
  - a. Edward Jenner
  - b. Louis Pasteur
  - c. Albert Calmette
  - d. Camille Guerin
10. The purpose of phase II vaccine trial is:
  - a. Safety in humans
  - b. Dose and efficacy
  - c. Safety at optimal dose; clinical efficacy, comparison
  - d. Post approval; surveillance – less common side effects
11. Type II error ( $\beta$ ) is defined as:
  - a. Probability of rejecting a true null hypothesis
  - b. Probability of accepting a true null hypothesis
  - c. Probability of rejecting a false null hypothesis
  - d. Probability of accepting a null false hypothesis
12. The visual representation of summarized data that shows us the count of subjects according to various class interval is known as:
  - a. Box and whisker plot
  - b. Stem and leaf plot
  - c. Frequency distribution table
  - d. Bar diagram
13. Which of the following does not include “Specific Protection” under primary prevention?
  - a. Tab Rifampicin to those in contact with meningitis
  - b. Health Education
  - c. Pentavalent vaccination
  - d. Wheat flour fortified with added iron
14. A study was undertaken to find the relationship between COPD and smoking. Patients’ data was collected through records from government hospital and record from Government hospital and record of cigarette sale from finance and taxation departments. What type of study design is this?
  - a. Cross sectional
  - b. Ecological
  - c. Operational
  - d. Physiological
15. Patient reports 4 hour after having a clean wound without laceration. He had taken TT 10 years before. The next step in management is:
  - a. Single dose of TT
  - b. Full course of TT is given
  - c. Tetanus immunoglobulin + 1st dose TT
  - d. Tetanus immunoglobulin + full course of TT.
16. Dengue discharge protocol includes which of the following:
  - a. 24 hours after recovery from shock
  - b. Urine volume > 200 mL
  - c. 24 hours after absence of fever without use of paracetamol
  - d. Return of normal appetite
17. Improving quality of labour room is done for which program:
  - a. LaQshya
  - b. India New born Action Program
  - c. JSSK
  - d. Ayushman Bharat
18. Variation in a given data set can be compared with another data set with different mean and SD by:
  - a. Coefficient of correlation
  - b. Coefficient of regression
  - c. Coefficient of variation
  - d. Standard deviation
19. Social insurance was introduced by:
  - a. Bismarck
  - b. Baba Amte
  - c. Mahatama Gandhi
  - d. Martin Luther King
20. Maslow’s hierarchy of needs is:
  - a. Safety, Self-actualization, Belonging, Esteem, Physiological
  - b. Safety, Physiological, Belonging, Esteem, Self-actualization
  - c. Self-actualization, Physiological, Safety, Belonging, Esteem
  - d. Physiological, Safety, Belonging, Esteem, Self-actualization
21. What is the new change in National Programme on Prevention and Control of Diabetes, Cardiovascular diseases and Stroke?
  - a. Opportunistic Screening
  - b. Awareness of lifestyle and behavior related illness
  - c. Specialized units at medical colleges
  - d. Integration with National Cancer Control Programme
22. 90:90:90 target in National Health Policy includes all **except**:
  - a. 90% of all people living with HIV know their HIV status
  - b. 90% of all people diagnosed with HIV infection receive sustained antiretroviral therapy.
  - c. 90% of all people diagnosed with HIV infection and TB receive sustained antiretroviral therapy and ATT.
  - d. 90% of all people receiving antiretroviral therapy will have effective viral suppression
23. Health indicator characteristics include all **except**:
  - a. Validity
  - b. Affordability
  - c. Reliability
  - d. Feasibility
24. Silent epidemic of the century is:
  - a. Alzheimer’s disease
  - b. Coronary artery disease
  - c. Chronic liver disease
  - d. Chronic obstructive lung disease

**COMMUNITY MEDICINE  
PAPER – FIRST**

**Note:** Attempt all questions.  
Draw suitable diagrams wherever necessary.

**Q. 2. Give reasons:** **(1 x 6 = 06)**

- a. Quarantine and isolation are not similar.
- b. Lung cancer can be controlled by primary preventive measures.
- c. Sentinel surveillance of disease is better than periodic mass screening.
- d. Submerged part of disease iceberg has immense importance to an epidemiologist.
- e. Sensitivity and specificity of a screening test is inversely related.
- f. BMI is the best of all indices of obesity.

**Q. 3. Problem based question:** **(1+3+2 = 06)**

In a slum area with a population of 1000, which was getting its water supply from a single municipal water pipe, cases of Hepatitis E started occurring from 1 August to 3 October as per week ending date and number of cases:

Week ending	No. of cases
7 August	3
14 August	7
21 August	11
28 August	14
4 September	15
11 September	14
18 September	14
25 September	8
2 October	3
9 October	Nil

- a. Draw the epidemic curve.
- b. What type of epidemic curve is it and why?
- c. What was the possible cause of this epidemic?

**Q. 4. Write short notes on:** **(3 x 4 = 12)**

- a. Basic Epidemiological tools
- b. "BEINGS" model of causation of disease.
- c. Universal precautions in health care setting.
- d. Preventive strategy for Coronary Heart Disease.

**Q. 5. (i)** Give a brief account of different types of human reservoir of infection. Describe in brief the methods of controlling reservoir **(06)**

**(ii)** Enumerate the causes of blindness in India. Discuss in brief the three levels of eye care for prevention of blindness in our country. **(06)**

**Q. 6. Write in brief:** **(3 x 4 = 12)**

- a. WHO guidelines for treatment of Leprosy.
- b. Indigenous Corona virus vaccine
- c. Global health sector strategy on viral hepatitis (2016-21)
- d. Measures of Central Tendency

## M.B.B.S. FINAL PROFESSIONAL PART-I EXAMINATION, MARCH/APRIL-2022

## COMMUNITY MEDICINE

[Time allotted: Three hours]

PAPER - SECOND (SET - A)

[Max. Marks: 60]

Q. 1. Multiple choice questions (Darken the single best response in OMR sheet. Time allotted 25 minutes)

(0.5 x 24 = 12)

1. All are indicators for the assessment of the nutritional program **except**:
  - a. Weight and height of the preschool child
  - b. Prevalence of low Birth weight less than 2.5 kg in community
  - c. Nutritional assessment of the preschool child
  - d. Prevalence of pregnant mothers having Hb< 11.5 g% in the 3<sup>rd</sup> trimester
2. Which of the following is **not** an agricultural hazard?
  - a. Musculoskeletal disorders
  - b. Bagassosis
  - c. Byssinosis
  - d. Silicosis
3. ESI corporation works under:
  - a. Ministry of Labour
  - b. Ministry of Health
  - c. As autonomous body
  - d. Respective state government.
4. Kata thermometer was devised to measure:
  - a. Air Temp
  - b. Cooling power of Air
  - c. Humidity
  - d. Air movement.
5. Which of the following is **not** known to have an antioxidant effect?
  - a. Vitamin A
  - b. L-Ascorbic acid
  - c. Alpha-Tocopherol
  - d. Phylloquinone
6. Which of the following is **not** included in 'Cleans' in conduct of delivery?
  - a. Clean hands
  - b. Clean Perineum
  - c. Clean cutting and care of the cord
  - d. Clean surface of delivery
7. Iron/Folic acid tablets are distributed to private doctors for free distribution under which scheme:
  - a. NRHM
  - b. CSSM
  - c. Janani SurakshaYojana
  - d. Vande Mataram Scheme
8. All are **true** of colostrum **except**:
  - a. Rich in proteins and minerals
  - b. Rich in anti-infective factors
  - c. Rich in fats
  - d. Secreted for first few days
9. Single most important factor determining survival chances of newborn is:
  - a. Birth order
  - b. Multiple gestation
  - c. Intrauterine infection
  - d. Low birth weight
10. Perinatal mortality includes:
  - a. Stillbirths
  - b. Neonatal deaths
  - c. Stillbirths and Early neonatal deaths
  - d. Stillbirths and Neonatal deaths
11. The denominator in IMR is:
  - a. Total no of live births
  - b. Total no of live and still births
  - c. Total no of still births
  - d. Total population
12. Signs for classifying a child as having severe dehydration are all **except**:
  - a. Dry tongue
  - b. Sunken eyes
  - c. Not able to drink
  - d. Lethargic or unconscious
13. According to WHO adolescents are \_\_\_\_\_ years of age.
  - a. 10-19
  - b. 11-18
  - c. 10-17
  - d. 12-21
14. Child Guidance Clinics deals with:
  - a. Juvenile Delinquents
  - b. Children who are not adjusted to their environment
  - c. Both
  - d. None
15. Free and compulsory education is a fundamental right of the children in the age group:
  - a. 7-12 yrs.
  - b. 6-8 yrs.
  - c. 6-12yrs
  - d. 6-14 yrs.
16. The science of improvement of genetic endowment through breeding is:
  - a. Eugenics
  - b. Euthenics
  - c. Genetic counselling
  - d. None
17. Hot flushes occurring in postmenopausal women are mainly due to:
  - a. Psychological response
  - b. Neuroendocrine disturbance
  - c. Macrovascular changes
  - d. Microvascular changes
18. Risk factors for primary osteoporosis does **not** include:
  - a. High BMI
  - b. History of prior fracture
  - c. Family history of maternal hip fracture
  - d. Lack of weight bearing
19. Elderly is defined as the person aged above:
  - a. 60 yrs
  - b. 65 yrs
  - c. 70 yrs
  - d. 75 yrs
20. In Rhythm method for contraception, intercourse is avoided during:
  - a. 3-14 days
  - b. 5-25 days
  - c. 10-28 days
  - d. 7-21days
21. What is a mini pill:
  - a. Pill containing lesser amount of estrogen and progesterone
  - b. Once a month pill
  - c. Progesterone only pill
  - d. Emergency pill
22. The mechanism of action of IUD does **not** include:
  - a. Inducing mild inflammatory changes and foreign body reaction in the endometrium
  - b. Incapacitate the sperms and ovum, prevent sperm from fertilizing the ovum
  - c. Makes the uterine environment inhospitable for the blastocyst to be implanted
  - d. Increases the reverse peristalsis of uterus
23. Which of these is available only from animal sources?
  - a. Vitamin B<sub>12</sub>
  - b. Vitamin B<sub>1</sub>
  - c. Vitamin B<sub>6</sub>
  - d. VitaminB<sub>2</sub>
24. Emphasis is on results rather than on activities & processes in:
  - a. CPM
  - b. PERT
  - c. MBO
  - d. TQM

**COMMUNITY MEDICINE  
PAPER – SECOND**

**Note:** Attempt all questions.  
Draw suitable diagrams wherever necessary.

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- Q. 2. Give reasons:** **(1 x 6 = 06)**
- a. Milk is an efficient vehicle for a great variety of disease agents.
  - b. “Scope of preventive geriatric is enormous” justify.
  - c. ‘Fluorine’ is also called as “Double edged sword”
  - d. Excess intake of ‘Refined’ carbohydrates are not good for health
  - e. ‘Pre-placement’ is recommended public health measure.
  - f. Measles vaccination is not recommended in children <9 months of age.
- Q. 3. Problem based question:** **(1+2+1+1+1= 06)**
- Ramita came with her 18 month’s unimmunized child to the PHC with complaints of high fever, cough & difficulty in breathing from last 2 days. On examination respiratory rate of 62/min and chest in-drawing was observed, weight is 08 Kg. Child is not be able to take her feed normally.
- a. What is your provisional diagnosis?
  - b. Suggest initial line of treatment at PHC level.
  - c. What are the danger sign of deterioration of child’s condition you would like to instruct your health staff?
  - d. What are the modifiable factors for prevention of such conditions?
  - e. Under which National Programme above condition is covered?
- Q. 4. Write short notes on:** **(3 x 4 = 12)**
- a. Ergonomics
  - b. Social Security
  - c. Oxidation Pond
  - d. Early expanding stage and late expanding stage in the demographic cycle
- Q. 5. (i) What is nutritional surveillance? Outline the methodology of nutritional surveillance.** **(2+4 = 06)**
- (ii) What is a primary health centre? Enumerate the various functions of primary health centre.** **(2+4 =06)**
- Q. 6. Write in brief about:** **(3 x 4 = 12)**
- a. Determinants of growth & development
  - b. Rogi Kalyan Samiti
  - c. Hardness of Water
  - d. Supplementary action of protein