



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – MBA(HM)-2023

Course Name – Epidemiology & Public Health

Course Code - MBAHM206

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

(i) Policy makers want to introduce a new vaccine in the national immunization programme to reduce the morbidity and mortality from a particular vaccine preventable disease. Choose which of the following studies will they have to be conducted to determine the effectiveness of this new addition?

- a) Case-control study
b) Ecological study
c) Retrospective study
d) Field Randomized Trial

(ii) Determine type of study from the following description. The entire population of a given community is examined and all those judged as being free of bowel cancer are questioned extensively about their diet. These people are then followed-up for several years to see whether their eating habits will predict their risk of developing bowel cancer

- a) Case-control study
b) Clinical trial
c) Cross-sectional study
d) Cohort study

(iii) Identify which of the following is NOT true regarding case-control study ?
i. Appropriate for study of rare outcomes
ii. More time consuming than cohort study
iii. Multiple exposures can be examined
iv. Relatively expensive compared to cohort study

- a) Both (i) and (ii)
b) Both (iii) and (iv)
c) Both (ii) and (iii)
d) Both (ii) and (iv)

(iv) When was National Health Mission launched by the Indian government?

- a) 2004
b) 2005
c) 2006
d) 2007

(v) What is the full form of ASHA?

- a) Accredited Social Health Activist
b) Accreditation Social Health Activist

- c) Accredited Special Health Activist
d) Accredited Social Health Activation
- (vi) Choose the appropriate answer from the following options. A key features of a cross-sectional study are that: i) It usually provides information on prevalence rather than incidence ii) It is limited to health exposures and behaviors rather than health outcomes iii) is more useful for descriptive epidemiology than it is for analytic epidemiology iv) It is synonymous with survey
- a) options i) ii) iii) iv)
b) options ii) iii) iv)
c) options i) iii) iv)
d) options i) ii)
- (vii) Select the appropriate answer from the following options. A cohort study differs from a case-control study in that: i) Subjects are enrolled or categorized on the basis of their exposure status in a cohort study but not in a case-control study ii) Subjects are asked about their exposure status in a cohort study but not in a case-control study iii) Cohort studies require many years to conduct, but case-control studies do not iv) Cohort studies are conducted to investigate chronic diseases, case-control studies are used for infectious diseases
- a) options i) ii) iii) iv)
b) options iii) iv)
c) options ii) iii) iv)
d) options i) ii) iii)
- (viii) Choose the appropriate answer from the following options. A study in which children are randomly assigned to receive either a newly formulated vaccine or the currently available vaccine, and are followed to monitor for side effects and effectiveness of each vaccine, is an example of which type of study? i) Experimental ii) Observational iii) Cohort iv) Case-control v) Clinical trial
- a) options v)
b) options i)
c) options iii) iv)
d) options i) v)
- (ix) Choose the appropriate answer from the following options. When analyzing surveillance data by age, which of the following age groups is preferred? i) 1-year age groups ii) 5-year age groups iii) 10-year age groups iv) Depends on the disease
- a) options i) ii) iii)
b) options i) ii) iii)
c) options iv)
d) options i) ii) iii) iv)
- (x) Which of the following mortality rates use the estimated total mid-year population as its denominator? Choose the appropriate answer i) Age-specific mortality rate ii) Sex-specific mortality rate iii) Crude mortality rate iv) Cause-specific mortality rate
- a) options ii) iii) iv)
b) options i) ii) iii) iv)
c) options iii) iv)
d) options i) ii) iii)
- (xi) Residence of three villages with three different types of water supply were asked to participate in a study to identify cholera carriers. Because several Cholera deaths had occurred in the recent past, virtually every one present at the time submitted to examination. The proportion of residents in each village who were carriers was computed and compared. Can you determine the type of study?
- a) Cross sectional study
b) Case control study
c) Concurrent cohort study
d) Non concurrent
- (xii) Choose the correct answer and complete the sentence. Spot maps are used for a disease in epidemiology for depiction of _____ i) Local distribution ii) rural-Urban variation iii) National variations iv) International variations
- a) Options i) iii) iv)
b) Options i) iii)
c) Options i) ii) iii) iv)
d) Option i)
- (xiii) Ideal temperature for storage of DPT vaccine at PHC level is
- a) 0 °C
b) 2 to 8 °C
c) Room temperature
d) -20 °C

- (xiv) The Body Mass Index (BMI) for a normal adult is
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|-----------------|-----------------|
| a) 13.5 – 17.99 | b) 18.5 – 24.99 |
| c) 25.5 – 30.99 | d) 31.5 – 35.99 |
- (xv) Which level of prevention/s is/are applicable for implementation in a population which is not yet exposed to risk factors? i) Tertiary Prevention ii) Secondary Prevention iii) Primary Prevention iv) Primordial Prevention(Choose the appropriate answer)
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| a) options i) iv) | b) option iv) |
| c) option i) | d) options i) ii) |

Group-B

(Short Answer Type Questions)

3 x 5=15

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| 2. Demonstrate the relationship between Incidence and Prevalence. | (3) |
| 3. "Cohort studies offer several advantages that make them invaluable in epidemiological research"- Justify the statement. | (3) |
| 4. What are the signs and symptoms of Malaria? | (3) |
| 5. What is the importance of Surveillance in Epidemiology? | (3) |
| 6. Evaluate the importance of IEC in preventing HIV/AIDS. | (3) |

OR

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| Evaluate the importance of the home based newborn care recommended in RCH Phase II | (3) |
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Group-C

(Long Answer Type Questions)

5 x 6=30

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| 7. Explain different modes of interventions in disease control. | (5) |
| 8. Explain the concept of Experimental study with suitable examples. | (5) |
| 9. Explain the measures to be adopted for prevention of communicable diseases. | (5) |
| 10. Explain the epidemiological factors of Leprosy. | (5) |
| 11. Evaluate the importance of Revised National Tuberculosis control programme in eliminating Tuberculosis in India. | (5) |
| 12. Evaluate the role of National Population Policy in controlling population explosion of India | (5) |

OR

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| Express your opinion regarding importance of adopting Sustainable development goals. | (5) |
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