



School of Digital Health

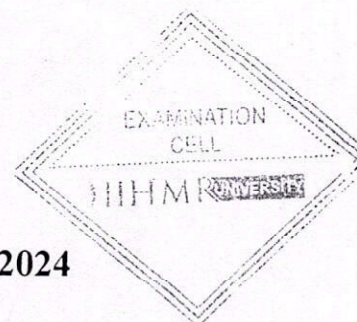
MBA Healthcare Analytics

Batch-01st (2024-2026)

First Year, Term 1, End Term Examinations, December 2024

CC – 605 Essentials of Epidemiology

Enrolment No.:



Time - 3 Hour

Maximum Marks: 50 (Minimum Marks: 20)

Instructions to students:

- This question paper contains 2 printed pages.
- Don't write anything on the Question Paper except writing your Enrolment No.

Part A

(Maximum Marks: 5)

Q1. State True or False / answer in one word, as applicable, for the following (1 mark each):

- Biomedical concept describes Health is described as absence of disease: True or False
- Disease is associated with signs and symptoms: True or False
- Apart from Agent and environment, what is the third triad of epidemiology?
- Stage of subclinical disease can be managed thru tertiary health care: True or False
- Expert opinion is considered as the highest level of evidence: True or False

Part B

(Maximum Marks: 15)

Answer the following questions (5 mark each). Note that there is a choice between Q2 & Q3, Q4 & Q5 and Q6 & Q7.

Q2. List and describe briefly the system components of health care service.

OR

Q3. List and describe briefly at least three of the nine Bradford hills criteria of causation.

Q4. Describe confounding effect in an epidemiological study.

OR

Q5. Describe real world data and list two indicators that is considered as RWD.

Q6. Describe randomization in an epidemiological study, why is it done?

OR

Q7. Describe sensitivity of a medical device with an example.

Part C**(Maximum Marks: 30)**

Answer the following questions in detail (10 mark each). Note that there is a choice between Q8 & Q9, Q10 & Q11 and Q12 & Q13.

- Q8. You are interning at 500 bedded hospital. List five data points that will help you to understand the performance of the hospital out patient service. How will you collect the data. How can you improve the data collection, digitally?

OR

- Q9. You are interning at an ecommerce company that delivers medicine to home. List five data points that will help you to understand the performance of the service provided at patient level. How will you collect the data. How can you improve the data collection, digitally?

- Q10. You are interning at a tertiary hospital. List five data points that will help you to understand the effectiveness of treatment provided at the intensive care unit. How will you collect the data. How can you improve the data collection, digitally?

OR

- Q11. You are interning at a tertiary hospital. The hospital would like to purchase a new MRI scanner. List five data points that will help you to justify the purchase. How will you collect the data. After purchase what data points will you collect to validate your justification?

- Q12. A founder of a start up company approaches you to discuss about a new concept for a digital stethoscope that can also record cough. List three epidemiological study designs including aim, objectives, population, methods that can add value to his concept.

OR

- Q13. A founder of a start up company approaches you to discuss about a new concept for an ai enabled fundus camera for the eye. List three epidemiological study designs including aim, objectives, population, methods that can add value to his concept.

