

Master copy
[Signature]
3.4.2024

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MSc (BIOMEDICAL INFORMATICS) SEMESTER III EXAMINATION
APRIL 2024

Date:- 3rd April 2024

Time:- 1.30 p.m. - 3.00 p.m.

SEQ PAPER

Answer **all three (03)** questions.
Answer each question in a separate book.

Part A - M11 – Management

1. Project management is an important aspect of health sector digitalization. As a Medical Officer/Health informatics (MO/HI), planning various aspects of Electronic Medical Record (EMR) system implementation is key among your responsibilities. Engaging stakeholders is vital for the institutionalization of the EMR.
 - 1.1. Define stakeholder analysis. (20 marks)
 - 1.2. Discuss how you will perform a stakeholder analysis for a proposed EMR system implementation in an Out-Patient Department (OPD) in a Base Hospital under a provincial health department. (50 marks)
 - 1.3. Briefly outline the benefits of contingency planning in an EMR implementation. (30 marks)

Part B - M13 - Medical Data and Information Management

2. The World Health Organisation (WHO) issues guidelines that can be adopted in the context of national health systems.
 - 2.1. Briefly discuss problems associated with implementing WHO guidelines in a country context. (30 marks)
 - 2.2. WHO SMART guidelines is a concept introduced in designing health information systems.
Describe WHO SMART guidelines approach with its underlying concepts. (40 marks)
 - 2.3. Outline how WHO SMART guidelines can overcome the issues of guideline implementation recognised in question 2.1, in terms of health service delivery. (30 marks)

Contd.../2-

Part C - M14 - Disease surveillance and IT for Population Genomics

3. Disease Surveillance is a key concept in public health with application across disciplines.
 - 3.1. List the goals of public health disease surveillance. (20 marks)
 - 3.2. Outline the steps you will follow in establishing a public health disease surveillance system as a Medical Officer in Health Informatics (MO/HI). (30 marks)
 - 3.3. Discuss the hospital-based surveillance system in Sri Lanka, also known as the Indoor Morbidity and Mortality Reporting (eIMMR) system. (Use a suitable diagram to elaborate your answer). (50 marks)