

Master Copy

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MSC (BIOMEDICAL INFORMATICS) END OF SEMESTER III
EXAMINATION – JANUARY 2022

Date-: 31st January 2022

Time-: 1.30 p.m. – 3.00 p.m.

SEQ PAPER

Answer **all three (03)** questions.

Answer each part in a separate book.

Part A – Module 11 – Management

1. As a Medical Officer in Health Informatics you are asked to supervise and manage the implementation of a Health Information Management System (HIMS) in your institution.
 - 1.1. List five (05) barriers/challenges you may encounter in implementing the HIMS. (30 marks)
 - 1.2. Select one (01) such barrier/challenge and describe how you would overcome it for successful implementation of the HIMS. (30 marks)
 - 1.3. Delegation of work is important in the management process. Briefly explain which activities involved in implementation of the HIMS you would delegate with justification. (20 marks)
 - 1.4. Supervision is a helping process and not a fault finding activity. Briefly explain how you would supervise the activities that you proposed to delegate in 1.3 above. (20 marks)

Part B- Module 13 – Medical Data and Information Management

2. Telemedicine and consumer health informatics are integral to digital health services.
 - 2.1. List the different types of information that can be transferred in a Telemedicine consultation giving two (02) examples for each type. (25 marks)
 - 2.2. Describe five (05) risks that can arise with the rapid expansion of Telemedicine services in Sri Lanka and how they can be mitigated. (25 marks)
 - 2.3. Describe the factors that favour expansion of consumer health informatics in Sri Lanka. (25 marks)
 - 2.4. Name two (02) guidelines published by the Ministry of Health, Sri Lanka and briefly explain how they streamline digital health practices. (30 marks)

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Part C- Module 14- Disease Surveillance and IT for Population Genomics

3.

- 3.1. Name five (05) key elements of a disease surveillance system. (25 marks)
- 3.2. Briefly describe the main uses of surveillance information. (25 marks)
- 3.3. Compare and contrast active and passive surveillance. (20 marks)
- 3.4. Briefly describe how genomic surveillance of COVID-19 viral strains have enabled prediction of disease trends and guided control measures globally. (30 marks)