

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR MD IN HEALTH INFORMATICS
MAY 2022

Date: 9th May 2022

Time: 12.00 noon – 2.00 p.m.

STRUCTURED ESSAY QUESTIONS

PAPER I

INFORMATION & COMMUNICATION TECHNOLOGY

Answer all four (04) questions.

Answer each question in a separate book.

1. Write short notes on the health care information systems implemented in Sri Lanka.
 - 1.1. eReproductive Health Management Information System (eRHMIS). (25 marks)
 - 1.2. Hospital Health Information Management System (HHIMS). (25 marks)
 - 1.3. electronic Indoor Morbidity and Mortality Reporting (eIMMR). (25 marks)
 - 1.4. Web Immunization System (WebIS). (25 marks)

2. Health sector computerization is an emerging theme, especially in the global south.
 - 2.1. Outline the factors that need to be considered in health sector computerization. (30 marks)
 - 2.2. Discuss the ethical issues that may arise in ICT enabled work environments in the healthcare sector. (40 marks)
 - 2.3. Briefly explain how you can use HIPAA guidelines in health sector computerization. (30 marks)

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3. Remote patient monitoring is becoming a popular concept in Digital Health.
 - 3.1. Briefly discuss the advantages and disadvantages of remote patient monitoring. (30 marks)
 - 3.2. Outline the challenges in remote patient monitoring in a Low-Middle Income Country (LMIC) context. (30 marks)
 - 3.3. Propose a high level architecture for a Non Communicable Diseases (NCD) information system that supports home-based care and remote patient monitoring for the state health sector of Sri Lanka. (40 marks)

4.
 - 4.1. List four (04) different technologies that may be used to facilitate online learning. (20 marks)
 - 4.2. Describe the human resources requirement when developing an online training course. (40 marks)
 - 4.3. Discuss a learning management system in terms of its features, benefits and limitations when used in the Sri Lankan context for health professional training. (40 marks)

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Date: 9th May 2022

Time: 2.30 p.m. – 4.30 p.m.

STRUCTURED ESSAY QUESTIONS

PAPER II
HEALTH

Answer all four (04) questions.

Answer each question in a separate book.

1. Public-Private Partnerships among health care providers is an essential aspect in reaching Universal Health Coverage. Discuss the need for Public-Private Partnerships in realizing Universal Health Coverage in Sri Lanka with emphasis on using ICT. (100 marks)
2. Write short notes on the following using examples from digital health.
 - 2.1. Disease Surveillance. (50 marks)
 - 2.2. Action Research. (50 marks)
3. Data and information are essential to maintain the quality of clinical care in a health system.
 - 3.1. Explain the term 'Health Indicator' with three (3) examples. (50 marks)
 - 3.2. Explain how health system fragmentation may affect the data quality. (50 marks)
4. Social determinants of health are the economic and social conditions that influence individual and group differences in health status.
 - 4.1. Discuss how social determinants may influence the health of a person by using examples from education, environment, income and religion. (40 marks)
 - 4.2. Discuss how digital health interventions can promote access to health care overcoming barriers caused by social inequities. (60 marks)