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POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION FOR MD IN HEALTH INFORMATICS
NOVEMBER 2019

Date:- 28th November 2019

Time :- 9.30 a.m. – 11.30 a.m.

STRUCTURED ESSAY QUESTIONS

PAPER I
(INFORMATION & COMMUNICATION TECHNOLOGY)

Answer all four (04) questions.

Answer each question in a separate book.

1.
 - 1.1. Discuss the need for clinical and public health data exchange requirement in Sri Lankan digital health ecosystem. (40 marks)
 - 1.2. Propose a high-level architecture for clinical-public health data exchange for interoperability of heterogeneous health information systems. (60 marks)
2.
 - 2.1. Discuss pros and cons of cloud hosting and cloud storage in national digital health architecture. (40 marks)
 - 2.2. In the case of communicable diseases such as Dengue/Ebola, what possible insight could be gained from Bigdata research. (60 marks)


Contd..../2-

3.

- 3.1. Discuss two (02) principle advantages of using mobile devices to collect field data. (20 marks)
- 3.2. Enumerate main considerations (technical, social and financial) if you were entrusted to design a mobile solution for Public Health Medical Officer (PHM) level data entry by Family Health Bureau (FHB)? (30 marks)
- 3.3. Suggest a mechanism to assure the accuracy and credibility of field data collected in the above manner. (50 marks)

4.

- 4.1. Briefly describe a Sri Lankan example of a successful implementation of a clinical information system implementation. (50 marks)
- 4.2. Discuss the factors contributing to successful implementation of clinical information systems. (50 marks)

11


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SELECTION EXAMINATION FOR MD IN HEALTH INFORMATICS
NOVEMBER 2019

Date:- 28th November 2019

Time :- 1.00 p.m. – 3.00 p.m.

STRUCTURED ESSAY QUESTIONS

PAPER II (HEALTH)

Answer all four (04) questions.

Answer each question in a separate book.

1. As the 4th Industrial Revolution on healthcare, number of issues related to Human Resource (HR) has been surfaced. A newly appointed Regional Director of Health Services request you to do a “Situational Analysis”.
 - 1.1. List five (05) tools that can be used to do the above analysis. (20 marks)
 - 1.2. Out of the five (05) tools mentioned above, identify the most appropriate tool giving justifications. (30 marks)
 - 1.3. Outline your plan for the above analysis. (50 marks)

2.
 - 2.1. Describe the current notifiable disease surveillance system in Sri Lanka. (20 marks)
 - 2.2. Discuss the areas for improvements. (30 marks)
 - 2.3. Discuss the advantages of integrating above surveillance system with the hospital electronic health information systems. (50 marks)

Contd..../2-

3.
 - 3.1. Define “patient safety” in a hospital setting. (15 marks)
 - 3.2. List five (05) causes that can affect patient safety. (15 marks)
 - 3.3. Discuss how informatics could be utilized to enhance patient safety. (70 marks)

4.
 - 4.1. Describe current methods used to collect health data in Sri Lanka. (20 marks)
 - 4.2. Critically evaluate the drawback of above methods. (30 marks)
 - 4.3. Suggest a mechanism to overcome above drawbacks. (50 marks)