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POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

SELECTION EXAMINATION IN MD (HEALTH INFORMATICS) –
OCTOBER 2016

Date :- 24th October 2016

Time :- 9.00 a.m. – 11.00 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. Explain Agile Software Development. (40 marks)
 - 1.2. Discuss why Agile Method is a better option to deliver custom software in health domain. (60 marks)
2.
 - 2.1. Discuss the advantages and disadvantages of using Open Source in the health domain. (50 marks)
 - 2.2. Compare and contrast the open source acquisition process with the custom software development process. (50 marks)
3.
 - 3.1. Explain techniques that can be used in Business Process Analysis (BPA) in a hospital setting with suitable examples. (40 marks)
 - 3.2. What are the possible steps you could take as the leader of the BPA team to capture functional and non-functional system requirements? (60 marks)
4.
 - 4.1. Describe the possible Graphical User Interface design best practices for a mobile data collection app. (30 marks)
 - 4.2. Propose a system design Software Requirement Specification (SRS) for a clinic system in a tertiary care setting. (70 marks)

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SELECTION EXAMINATION IN MD (HEALTH INFORMATICS) – OCTOBER 2016

Date :- 24th October 2016

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. A Master Patient Index (MPI) is a prerequisite for implementing a nationwide interoperable electronic patient record system.

Provide an answer which describes what a MPI is, why a MPI is needed, what data fields should be there in a MPI, and how a MPI should be implemented. Add a brief note to your answer describing what measures have to be taken to implement a MPI for Sri Lanka. (100 marks)

2. Procuring goods, services, consultancies and work from external sources is becoming increasingly important in the process of implementing digital health in Sri Lanka.

Provide an answer which describes the different types and methods of procurement. Add a brief note to your answer describing special considerations in Information and Communication Technology (ICT) procurement for digital health implementation when compared to other procurements. (100 marks)

3. Public health organizations require well designed information systems in order to make optimal use of information.

Provide an answer which describes the factors that contribute to successful implementation of electronic public health information systems. Add a brief note to your answer giving an example of a successful implementation of an electronic public health information system in Sri Lanka and how it has contributed to decision making and improving health outcomes. (100 marks)

4. An electronic Hospital Information System (HIS) is a comprehensive and integrated information system designed to manage all aspects of a hospital's operation.

Provide an answer which discusses different components of a HIS and the steps that should be taken to implement such a system in a hospital. (100 marks)