Medical Laboratory Sciences Health Informatics Exams

Section A: Answer All Questions

- 1. The health care organisation comprises numerous cadres who exchange health care information. Describe the health care organisation as an enterprise and how you would plan to implement extensible, scalable information systems. (50)
- 2. What are the requirements for Internet services of availability, ubiquity, bandwidth, latency and security of the different health care service domains. (50)

Section B: Answer Any Two Questions

- 1. Describe in detail how a laboratory information management system can strengthen decision support and clinical outcomes through advanced tools such as expert systems, data mining and knowledge discovery systems. (50)
- 2. This is a two part question
- a. How can health information exchange be achieved between a laboratory information system and electronic health record system through different types of globally agreed health information exchange standards? (25)
- b. Describe how laboratory information management systems can strengthen disease surveillance systems (25)
- 3. This is a two part question
 - a. Describe the key security requirements for ensuring data in a laboratory information management system is secure. (25)
 - b. How can laboratory services leverage upon telemedicine technologies? (25)
- 4. This is a two part question
 - a. Laboratory services have been transformed by the human genome project. Describe how the human genome has transformed laboratory services and the ethical and legal implications. (20)
 - b. Describe the potential of mobile health applications in strengthening laboratory services. (30)

End