

BHSM Health Informatics Exams (SHI 100)

Section A: Answer All Questions

1. Define health informatics, and the different applications in biomedical informatics, medical informatics and public health informatics (50)
2. Health care data is dependent on the services being offered. 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. This is a two part question
 - a. Define nursing informatics and its applications in health care. How can some of these technologies be used for improved patient care in developing countries? (25)
 - b. Define consumer health informatics, its applications and technologies required for its implementation (25)
2. This is a two part question
 - a. Define the core functionalities of electronic health records and how they would improve the business processes of healthcare (25)
 - b. The Internet has brought in new capabilities through Online Analytical Processing (OLAP) services. How can health care leverage on the potential of knowledge discovery and data mining in view of the increased adoption of electronic data capture systems? (25)
3. The business process of health care involves the interdependence of different service domains. How can services achieve systems interoperability for all possible systems implementable in a health care setting? (50)
4. This is a two part question
 - a. Information is a strategic resource that must enhance decision support. Describe the 5 rights of effective information management and how these apply to a health care environment. (20)
 - b. Infectious diseases like Ebola require rapid information management systems in place. Describe some of these information systems and the settings for their deployment. (30)
5. The introduction of electronic information management systems in healthcare presents a paradigm shift in organisational behaviour. Describe the strategies for managing change in health care organisation. (50)
6. This is a two part question:
 - a. Define telemedicine, the different types of telemedicine and its applications in resource constrained settings? (25)
 - b. The human genome project has brought new possibilities to human development. Describe these potentials and address the ethical issues this has raised. (25)