

IT GOVERNANCE

March-April 2022

Time allowed- 3:30 hours

Total marks- 100

[N.B. - The figures in the margin indicate full marks. Questions must be answered in English. Examiner will take account of the quality of language and of the manner in which the answers are presented. Different parts, if any, of the same question must be answered in one place in order of sequence.]

	Marks
1. (a) The National ICT Policy stipulates “Online VAT Registration” and “Online Tax Filing” as action items. What are the expected deliverables and benefits of these action items?	4
(b) A certain ministry of Bangladesh government published a gazette only in electronic format. Do you think that the obligations of publication have been fulfilled by this? Answer with exact reference to the relevant Act.	3
(c) Later on, the same ministry published a different gazette as an Official Gazette, the earlier one being an Electronic Gazette. The two gazettes were identified on different dates. What will be considered as the date of publication for this gazette? Again, answer with exact reference to the relevant Act.	3
2. Mobile Financial Services (MFS), like bKash, Trust Axiata Pay (TAP), and Nagad are very popular and loved by the people of Bangladesh nowadays. These institutions cater to around 35 million people with an annual credit of over USD 7 billion. They have done an incredible job to successfully bring a vast majority of people under the umbrella of digital financial services. Briefly describe the impact of Fintech in Bangladesh.	10
3. Your company is thinking to buy a Decision Support System using AI. As a part of this process, what are the disadvantages that you will face if you adopt DSS in your organization? Briefly describe.	10
4. (a) The CTO of a new IT company “Lenden Ltd.” realized that before developing an IT strategy, it is mandatory to have effective information technology architecture for his company. In this respect briefly describe the information technology architecture of that organization.	8
(b) The above company, “Lenden Ltd” faces different challenges from the more established companies in IT sector. The CTO of Lenden Ltd. believe that the proper use of IT strategy can be a sustainable competitive weapon. Considering this scenario, briefly describe different aspects of strategy.	7
5. (a) Consider a web-based application that includes a web client, a server, and corporate information systems linked to databases. Enumerate the security challenges and vulnerabilities presented by each of these components. Also point out the natural and physical issues that can cause disruptions at any point in the network.	4
(b) Compare and contrast between computer viruses and worms.	4
(c) Explain clearly how pharming occurs in identity theft.	2
(d) Elucidate, with the necessary technical details, how packet filtering, stateful inspection, Network Address Translation (NAT), and application proxy filtering can be used to provide firewall protection.	6
(e) Explain encryption of data. Elaborate on how public key/private key encryption works. Mention a couple of major encryption standards.	4

6. Suppose the CEO of your company asks you to find a Web Enabled way to get information to and from the sales people in your company. As per the CEO's request, you think there might be a systematic way to develop a good solution for your company. In that regard answer the following questions:
- (a) How do you recognize and define a problem or opportunity using systems thinking? 5
 - (b) Discuss the concepts of "shadow" IT culture. 5
 - (c) How do you describe the overview of the implementation process? 5
7. The organizations need to consider the effect of laws and regulations on IS audit planning. Each organization, regardless of its size or the industry within which it operates, will need to comply with a number of governmental and external requirements related to computer system practices and controls and to the manner in which computers, programs and data are stored and used. Now answer the following questions based on the CISA Review Manual.
- (a) Discuss the regulatory impact of the Basel Accords on IS audit planning. 2
 - (b) Enumerate the steps an IS auditor would perform to determine an organization's level of compliance with external requirements. 4
 - (c) What do the standards inform regarding statements of mandatory requirements for IS audit and assurance? 3
 - (d) Describe the multiple levels of documents in the framework for the ISACA IS Audit and Assurance Standards. 3
 - (e) In light of the ISACA IS guideline, describe in detail forensic audit. 4
 - (f) Enumerate the issues an audit documentation should include (both the mandatory and the recommended ones). Also, comment on the audit documentation format and media. 4

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