

PART – II Descriptive

1. NXN Inc. is an insurance company having its head office in Texas US, and operations in other countries across the world. With the aim to expand their business they started a subsidiary in India and obtained the licence from IRDA. Now they want to open their branches across India and also to appoint agents to sell their different insurance products. The company also wants to sell their products online. For this they wish to develop a website and a mobile application to market their products and enable their customers to pay the premium online. The company wants to use latest technologies and to establish an IT department with full IS security. The management of the company wants to follow the best practices in the area of governance. To fulfil their IT governance responsibilities the management wants to implement COBIT 5 framework in the organization.

You have been appointed as a consultant by the management of the company to assist them in this entire process. Kindly address the following queries raised by the management in this regard.

- (a) Management wants to know as to what are the benefits the company would derive by implementing COBIT 5 framework ? 6
- (b) What is the information that an IS auditor is expected to obtain at the audit location before proceeding with the IS audit as per the provisions of IRDA ? 5
- (c) What is the set of skills that is generally expected to be with an IS auditor ? 3

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2. (a) A Pharma company has chain of distributors and stockist at various cities of India. The company is having "Distributed data processing facilities" so that distributors, stockist, and members of sales team can access the application remotely. Being an IS auditor, suggest various ways for controlling remote and distributed data processing application. 6
- (b) During COVID'19, the management of a hospital wish to get developed an application software for online consultations. The proposed software can be used by public for general medical emergency including expected COVID situations. Suggest, what properties this potential application should possess to qualify for Expert System ? 5
- (c) What are the provisions related to penalty for publishing Electronic Signature Certificate false in certain particulars as under section 73 of IT Act 2000 ? 3
3. (a) As a BCP auditor, while reviewing the disaster recovery/business resumption plan that exist in the organization was developed using sound methodology. Which aspects should be reviewed by you as an auditor ? 6
- (b) "The management of Risk is now being understood as an effective part of IT governance". In the light of above statement, describe the various Risk Management Strategies. 5
- (c) What are the characteristics of private cloud ? 3
4. (a) "When properly implemented, audit trails provide an important detective control to help accomplish security policy objectives." In light of the above statement, list out the ways in which audit trails can be used to support security objectives ? 6

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- (b) Briefly describe the various ways to implement application and monitoring system access control pertaining to logical access control. 5
- (c) Define the following terms as provided in the Information Technology Act : 3
- (i) Access
 - (ii) Intermediary
 - (iii) Asymmetric Crypto System
5. (a) The characterizing features of Waterfall Model have influenced the software development community in big way. As a system developer, state three key characteristics and three strengths of Waterfall Model. 6
- (b) What are the important implications of information system in a business ? Explain. 5
- (c) Briefly explain any three applications fields of Web 2.0. 3
6. (a) There are many aspects to the application controls that are reviewed as a part of any application audit but out of these, application security is one of the most important controls. Describe the audit issues relating to operational layer with respect to the audit of application security control. 6
- (b) Describe the various categories of tests that a programmer typically performs on a program unit. 5
- (c) Briefly describe the control procedures over source documents which an organization must implement to account for each document to control the frauds. 3

OR

Explain, how a physical component 'Modem' in a network communication can affect the reliability of communication system. 3

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