

Roll No.

Total No. of Questions – 7

Total No. of Printed Pages – 4

Time Allowed – 3 Hours

Maximum Marks – 100

ECL

Answers to questions are to be given only in English except in the case of candidate who have opted for Hindi Medium. If a candidates who has not opted for Hindi medium, his/her answers in Hindi, will not be valued.

Question No. 1 is compulsory.

Attempt any five questions from the remaining ~~six~~ questions.

Marks

1. Software development is an integrated process spanning the entire IT organization. ABC Technologies Ltd. is a leading company in the field of software development of various domain. The company is committed to follow System Development Life Cycle (SDLC) with best practices for its different activities. A system development methodology is a formalized, standardized, documented set of activities that analysts, designer and user can come out to develop and implement an information system which contains appropriate controls for all its phases so as to retain records in electronic format with reasonable level of security.

Read the above carefully and answer the following :

- (a) As a part of system development team, the system analyst prepare a document called the 'System Requirement Specification' (SRS). 5
Describe the contents of SRS for a typical software development.

2nd slot

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- (b) Describe the provisions for retention of electronic records under Section 7 of Information Technology (Amendment) Act, 2008. 5
- (c) Explain the role of auditor in information processing system design through SDLC. 5
- (d) 'Security requirement should be identified and agreed prior to the development of information system. This begins with analysis, specification and provide controls at every stage.' Discuss the 'control and objectives' of system development and maintenance area of information security management. 5
2. (a) What facilities are available in Treasury Cash Management of an ERP package ? Explain. 6
- (b) Discuss the issues to be addressed in 'Access Control' under information security policy. 6
- (c) Describe the strength of waterfall approach to system development. 4
3. (a) What do you mean by Encryption ? Differentiate between private key encryption and public key encryption. 6
- (b) In a computer-held information system, what types of protection an organization can use to prevent leakage or misuse of information ? Explain. 6
- (c) While auditing a Disaster Recovery Plan (DRP) for information technology (IT) assets, what concerns are required to be addressed ? Briefly explain. 4

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4. (a) Describe the various threats to the computerized environment due to cyber crimes. 6
- (b) Briefly describe the advantages and disadvantages of continuous auditing techniques. 6
- (c) Discuss the methodology of developing a Business Continuity Plan. 4
5. (a) Describe the major pre-requisites of a Management Information System to make it an effective tool. 6
- (b) Briefly explain about various categories of software maintenance used in System Development Life Cycle (SDLC). 6
- (c) Mr. A is regularly sending obscene in electronic form to Ms. B. When Ms. B made a complaint to Police, it was found that all the communications were sent through XYZ network service provider. Police have held both Mr. A and XYZ network service provider as liable for this act. Suggest under what provisions of Information Technology (Amendment) Act, 2008, the XYZ network service provider can get exemption from the liability ? Also discuss the relevant provisions of the above section. 4
6. (a) Explain the various financial control techniques used in information system control. 6
- (b) An owner of a small local store is currently using manual system for his day to day business activities viz. purchase, sales, billing, payments receipts etc. In the last few years, turnover of the store is increased manifold and now it has become increasingly difficult to handle all these activities manually. You being an IT expert and his auditor, are requested to suggest which operation support system will be most suitable for him. Also advise him what activities can be performed by the proposed system and what are major limitation of it. 6
- (c) As per legal theory of Torts, which kind of insurance you would suggest to cover the risk of loss ? Briefly explain. 4

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(4)

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Marks

4×4

=16

7. Write short notes on any four of the following :

- (a) Continuous and Intermittent Simulation (CIS)
- (b) HIPPA
- (c) Risk Assessment
- (d) Information System (IS) security objective
- (e) COBIT 5 Enablers

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