

# INSTITUTE OF COST AND MANAGEMENT ACCOUNTANTS OF PAKISTAN



## Fall 2012 (February 2013) Examinations

Saturday, the 23rd February 2013

### INFORMATION SYSTEMS & I.T. AUDIT – (ML-303) SEMESTER - 3

Time Allowed – 2 Hours 45 Minutes

Maximum Marks – 90

Roll No.:

- (i) Attempt ALL questions.
- (ii) Answers must be neat, relevant and brief.
- (iii) In marking the question paper, the examiners take into account clarity of exposition, logic of arguments, presentation and language.
- (iv) Read the instructions printed inside the top cover of answer script CAREFULLY before attempting the paper.
- (v) DO NOT write your Name, Reg. No. or Roll No. anywhere inside the answer script.
- (vi) Question No.1 – “Multiple Choice Question” printed separately, is an integral part of this question paper.
- (vii) **Question Paper must be returned to the invigilator before leaving the examination hall.**

MARKS

#### SECTION – “A”

- Q. 2 (a)** What do you understand by ‘Data Integrity Testing’? A multinational stock exchange company uses online multi-user transaction processing system controlled by Oracle DBMS. Discuss properties of **ACID** principle used in this online Oracle based transaction processing system. **07**
- (b)** Discuss importance of Customer Relationship Management (CRM) to meet expectations of customers. Distinguish between Operational and Analytical CRM. **08**
- Q. 3 (a)** ‘Modern operating system provides virtualization features’. Elaborate the statement. ABC Company is planning to reduce its operational cost by implementing virtualization solution. Compare advantages and disadvantages of this solution. **06**
- (b)** Moving data in a batch transmission process through the traditional Electronic Data Interchange (EDI) process involves three functions within each trading partner’s computer system. Enlist and briefly explain these functions used in traditional EDI process. **09**
- Q. 4 (a)** Software development organizations implement process methodologies. Discuss features of waterfall and spiral models. How spiral model is supportive in risk management? **07**
- (b)** A multinational bank is establishing its different branches all over the country. These will be integrated through WAN. Discuss different WAN technologies alongwith their features to provide point to point secure connectivity of all its branches to bank’s Head Office. (any eight) **08**

PTO

**SECTION – “B”**

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|-----------------|---|-----------|
| <b>Q. 5 (a)</b> | ‘Encryption’ is the need of today’s e-business. Discuss why Symmetric Encryption is used for Data Encryption and Asymmetric Encryption is used in Key exchange mechanism. If an individual wants to send messages using a public key cryptographic system, how does s/he distribute the public key in secure way? | <b>08</b> |
| <b>(b)</b>      | The changing technological infrastructure requires specific reviews of hardware, operating systems, IS operations, databases and networks. As an IS auditor, discuss main areas which need to be reviewed related to hardware.  | <b>06</b> |
|                 |   |           |
| <b>Q. 6 (a)</b> | ‘Policies and procedures’ reflect management guidance in developing controls over information systems. IS auditors should use policy as a benchmark for compliance. Discuss main features of information security policy document. How IS auditor can ensure Acceptable Internet Usage Policy?                    | <b>06</b> |
| <b>(b)</b>      | How CAAT helps IS auditor in gathering information from hardware and software environment. Generalized audit software (GAS) is a main tool used in CAAT. Discuss different functions supported by GAS.  | <b>09</b> |
|                 |   |           |
| <b>Q. 7 (a)</b> | There are various reasons to create Access Control Lists (ACLs). Discuss. How can network administrator secure network by implementing extended ACL’s on company router interface?  | <b>08</b> |
| <b>(b)</b>      | Discuss the process of developing and maintaining an appropriate ‘Business Continuity Plan’. Explain what are the major tasks involved when an IS auditor is evaluating the suitability of business continuity plan.  | <b>08</b> |

**THE END**