



No. of Pages - 14
No of Questions - 07

SCHOOL OF ACCOUNTING AND BUSINESS
BSc. (APPLIED ACCOUNTING) GENERAL / SPECIAL DEGREE
PROGRAMME

YEAR III SEMESTER I – INTAKE IV (GROUP A/B)
END SEMESTER EXAMINATION – AUGUST 2017

ICT 30330 Management of Information Technology

Date : 18th August 2017
Time : 5.30 p.m. - 8.30 p.m.
Duration : Three (03) hours

Instructions to Candidates:

- Write the Index Number in the space provided at the top of this sheet. Do not write your name anywhere in this question paper.
- This paper consists of three parts (A, B and C).
- Part A – Answer **ALL** the questions in the paper itself
Part B – Answer **ALL** the questions in the paper itself
Part C – Answer **ONE** question out of the two questions given.
- The total marks for the paper is 100.
- The marks for each question are shown in brackets.
- Answers should be written neatly and legibly.

Section A

Answer **ALL** Questions

Question No. 01

Select the most appropriate answer.

1. Which one of the following statements are correct?
 - A - IT strategy and IT plan are same
 - B - IT strategy is always based on the business strategy
 - C - IT planning involves identifying internal IT markets
 - a. A only
 - b. B only
 - c. A and C only
 - d. B and C only
2. Which of the following is an example for a strategic information system based on customer intimacy strategy?
 - a. A recommender system
 - b. A warehouse management system based on IoT
 - c. An e commerce website
 - d. A web portal for employees
3. A platform for digital economy does not contain _____
 - a. Digital media content
 - b. Digital display panels
 - c. Virtual currencies
 - d. Appliances with microcontrollers and network connectivity

4. Which of the following is an example for a recent technology innovation that pressurizes organizations?
- a. Data warehouse
 - b. Cloud computing
 - c. Broadband Internet
 - d. Data compression
5. Which of the following is an organizational response to its social responsibility?
- a. Bring your own device policy
 - b. Intrusion detection system implementation
 - c. Business analytics
 - d. Green computing practices
6. Which of the following is **not** a type of transaction costs?
- a. Search costs
 - b. Negotiation costs
 - c. Exchange costs
 - d. Decision costs
7. Which of the following is correct about computer programs?
- A. It is a synonym for “information systems”
 - B. Java and Visual Basic are two languages used to write computer programs
 - C. There are no free and open source programming languages
- a. A only
 - b. B only
 - c. A and B only
 - d. B and C only

8. Chargeback is;
- a. the pricing strategy for the firm's products and services
 - b. An internal billing mechanism for IT services offered to business functions
 - c. A mechanism to collect business requirements from IT users
 - d. A credit recovery process
9. Which of the following are possible reasons for an IT manager to opt for a cloud-based data center?
- A. The possibility of adding/removing infrastructure according to the demand
 - B. Data security is always guaranteed with a cloud-based data center
 - C. Maintenance workload on the in-house technical staff could be reduced substantially
 - D. Cloud is a cost-effective solution compared to an in-house data center
- a. A and B only
 - b. A and C only
 - c. A, B and C only
 - d. A, C and D only
10. Which one of the following statements is correct about **Rapid Prototyping** methodology in information systems development?
- a. Java is a popular rapid prototyping environment
 - b. It eliminates the need for systems analysis
 - c. It involves an iterative information systems development process
 - d. It does not have any significant advantages

(Total 20 marks)

Section B

Answer **ALL** Questions.

Question No. 02

- a. Briefly describe any three stages of the system development life cycle

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(6 marks)

b. LK Industries is a local company that manufactures steel furniture for orders. They have a large client base around the country and have a huge reputation for high quality products. However, their billing process has been a real mess with so many complaints from the customers everyday regarding incorrect entries and calculations. Moreover, as the bills are prepared manually and posted to the customers, it takes a longer time for a bill to reach the customer. The issues associated with the billing process severely impact the cash cycle of the company and the management has decided to implement a computerized billing system as a solution to this problem. You have been appointed as the project manager in this project.

i. State three requirements of the proposed billing system

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(3 marks)

ii. You have been suggested by a friend that the rapid application development (RAD) approach would be better than the traditional life cycle approach to develop this system. Do you agree with this? Justify your answer.

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(3 marks)

- iii. When selecting your project team, you have selected an experienced software developer with a sound knowledge in Java, PHP and MySQL, a quality assurance engineer as well as a business analyst. Justify your selection.

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(3 marks)

(Total 15 marks)

Question No. 03

- a. Define the term ‘internal sources of risks’

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(2 marks)

- b. Explain the role of a firewall in the three layers of network security

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(3 marks)

- c. A company added a web page to collect CVs from prospective employees for future job openings. The web developer however has not put any restrictions on the types of files that could be uploaded. Explain the terms **threats**, **vulnerabilities** and **risks** pertaining to this context.

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(6 marks)

- d. Suppose your organization is a research institute, where the Internet activities of the researchers cannot be prohibited. Briefly explain the importance of acceptable use policies (AUP) for such an organization.

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(4 marks)

(Total 15 marks)

Question No. 04

a. Define the term ‘competitive advantage’

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(2 marks)

b. Briefly explain the relationship between a strategic information system and competitive advantage

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(3 marks)

- c. A common mistake done by those who prepare an IT strategy is over emphasizing the technology and systems without paying adequate attention on the available demand for IT as well as control of IT within the organization.

i. What do you mean by demand for IT?

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(2 marks)

ii. Explain why it is important to overcome the above mistake.

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d. The following questions (i) and (ii) are based on the billing system explained in question 2-b above.

i. Do you think that the proposed billing system is a strategic information system? Justify your answer.

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(3 marks)

ii. Suppose that the proposed initiative has created an unrest among the billing clerks due to the fear of losing their jobs. State two actions you would take to resolve this conflict.

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(2 marks)

(Total 15 marks)

Question No. 05

- a. State three recent trends you observed in the environment that may induce organizations to seek for solutions with the help of IT

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(3 marks)

- b. Provide an example for a business model, a business process and a business activity.

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(3 marks)

- c. Globalization has imposed several pressures on modern organizations.

- i. What is the impact of the Internet on globalization?

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(2 marks)

- ii. Briefly explain two examples for the pressures coming to organizations due to globalization.

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- iii. How would the organizations respond to the pressures you mentioned in question 5 – c – ii above with the help of information technology?

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(3 marks)

(Total 15 marks)

Section C

Answer Any **One (01)** Question.

Question No. 06

Building a data warehouse is a significant investment for a business organization. Suppose you are the IT manager of a leading supermarket chain in Sri Lanka and you are in the process of writing a report to justify the investment of a planned data warehousing project to the top management. Explain the costs, benefits and risks of the proposed initiative that you wish to highlight in your report.

(Total 20 marks)

Question No. 07

“Cloud computing, Internet of Things and Big Data are no longer buzzwords. They represent technologies that revolutionize the way business organizations respond to the pressures coming from the environment”. Review this statement elaborating the important points.

(Total 20 marks)