



The University of Fiji

School of Science and Technology



Department of Computer Science/ Information Technology

ITC103

Information Systems in Organizations

Semester I, 2014

Final Examination Question Paper

Time Allowed: 3 Hours [10 Minutes Extra Allowed For Reading the Paper]
Weighting: 50%
Total Marks: 100 marks.

Section A:

Multiple Choice - 20 marks

Section B:

True/False - 15 marks

Section C:

Short/Long Answer Question 1 - 10 marks
Short/Long Answer Question 2 - 10 marks
Short/Long Answer Question 3 - 15 marks
Short/Long Answer Question 4 - 10 marks
Short/Long Answer Question 5 - 20 marks

Total 100 marks

Instructions

- Show your answers clearly in each question to gain maximum marks.
- You may ask for extra sheets from the supervisors if the need arises.
- Do not forget to write your name and ID number on all the extra sheet(s) attached.
- Programmable calculators are not allowed.

Section A.

Multiple Choice Questions

[20 marks]

1. _____ is the standard that enables wireless devices to access web based information and services.
 - A. HTTP
 - B. SMTP
 - C. WAP
 - D. WP

2. _____ transmission systems are widely used for high-volume, long distance, line-of-sight communication.
 - A. Microwave
 - B. Satellite
 - C. Radio
 - D. Infrared

3. Geostationary earth orbit (GEO) satellites orbit _____ miles directly above the equator.
 - A. 32,300
 - B. 22,300
 - C. 6434
 - D. 543

4. To communicate wirelessly, mobile devices typically have a built-in _____.
 - A. NIC
 - B. 802.11
 - C. hotspot
 - D. WNIC

5. Worldwide Interoperability for Microwave Access is the name for IEEE standard _____.
 - A. 802.11s
 - B. 802.16
 - C. 802.14
 - D. 802.14.4

6. What is using organizations from developing countries to write code and develop systems?
- A. Outsourcing
 - B. Business process outsourcing
 - C. Insourcing
 - D. Offshore outsourcing
7. Which of the following is the least common reason why companies outsource?
- A. Better manage the costs of internal processes
 - B. Concentrate resources on core business
 - C. Tap outside sources of expertise
 - D. Reduce headcount and related expenses
8. Which of the following is a challenge of outsourcing?
- A. Contract length
 - B. Competitive edge
 - C. Confidentiality
 - D. All of the above
9. Which of the following is considered a functional area information system (FAIS)?
- A. Software
 - B. IT Personnel
 - C. Accounting IS
 - D. None of the choices constitute a FAIS
10. _____ managers use information technology to manage the _____ process?
- A. Marketing; inventory
 - B. Human resource; site analysis
 - C. Manufacturing; promotion analysis
 - D. Marketing; product analysis
11. Which of the following information systems function to connect two or more organizations?
- A. Transaction Processing Systems (TPS)
 - B. Enterprise Resource Planning Systems (ERP)
 - C. Interorganizational Information Systems (IOS)

D. None of the systems listed connect two or more organizations

12. Which of the following statements about BP and IT is TRUE?

- A. BP's efforts to revamp their IT systems took longer than expected
- B. BP did not realize significant cost savings from their adoption of a new ERP
- C. BP lessened their dependence on IT vendors through their new ERP system
- D. All of the above are true

13. Which of the following is categorized as a technology type of business pressure?

- A. Information overload
- B. The changing nature of the workforce
- C. Societal responsibility
- D. Globalization

14. Which of the following is not categorized as one of the five major forces in Porter's Competitive Forces model?

- A. The threat of entry of new competition
- B. The bargaining power of suppliers
- C. The bargaining power of customers
- D. The cooperation among existing firms in the industry

15. Which of the following types of networks has the shortest range?

- A. PAN
- B. MAN
- C. LAN
- D. WAN

16. Which of the three types of wireline channels is typically the most expensive?

- A. Twisted-pair wires
- B. Coaxial cable
- C. Fiber-optic cable
- D. The three types generally carry the same costs

17. An information portal that uses internet applications to share data only within an organization is called a/n _____.

- A. PAN
- B. global WAN
- C. intranet

D. extranet

18. The Internet functions as a _____ while the World Wide Web is an _____.

- A. application; transport mechanism
- B. transport mechanism; application
- C. application; browser
- D. transport mechanism; browser

19. A professional sports team created a portal to keep their members up to date on schedules and league policies. Entry is restricted to their community. This is an example of a _____ portal.

- A. Commercial
- B. Enterprise
- C. Affinity
- D. Industry wide

20. Marsha runs a business where her 5 employees are all in different geographical locations and come together to meet as a team and work electronically. They are using _____.

- A. Email
- B. virtual collaboration
- C. chat rooms
- D. we-based call centers

Section B.

True/False Question

[15 marks]

1. Within the context of a university a list of graduate school prospects categorized by GPA would be considered data.
2. The TPS collects data continuously, typically in real time.
3. Business intelligence systems are primarily used by middle managers and knowledge workers.
4. The secondary key is a field that identifies a record with complete uniqueness.
5. The information on a wireless device is secure and cannot be copied or stolen.
6. The higher a satellite orbits the larger its footprint.
7. GEO satellite is used to power a GPS system.
8. M-commerce requires users to have a PC.
9. Cookies store your tracking history on your personal computer's hard drive.
10. Business wikis are collaborative web pages that allow users to edit documents, share ideas, or monitor the status of a project.

11. Outsourcing is a common approach using the professional expertise within an organization to develop and maintain the organization's information technology systems.
12. Software that meets employee needs may have a damaging effect on productivity and can even cause a business to fail.
13. Software built correctly can support nimble organizations and can transform as the organization and its business transforms.
14. Onshore outsourcing is contracting an outsourcing arrangement with a company in a nearby country.
15. A web service contains a repertoire of Web-based data and procedural resources that use shared protocols and standards permitting different applications to share data and services.

Short/Long Answer Questions

Question 1

[10 marks]

- a) Differentiate among data, information, and knowledge. [1.5 marks]
- b) Discuss the relationships among business pressures, organizational responses, and information systems. [2 marks]
- c) What is value chain? [0.5 mark]
- d) What is a business process? [0.5 mark]
- e) Chief information officer plays a major role in large organizations. Explain the roles and responsibilities of a CIO. [2 marks]
- f) Describe the components of computer based information systems. [1 marks]
- g) Porter's Five Forces Model helps determine the relative attractiveness of an industry. Discuss the five forces which help organizations evaluate business segments. [2.5 marks]

Question 2

[10 marks]

- a) Describe five strategies that companies can use to achieve competitive advantage in their industries. [2.5 marks]
- b) Define ethics, and list its four categories as they apply to IT. [2.5 marks]

- c) Define mobile commerce and mobile computing? [0.5 mark]
- d) Define pervasive computing and describe two technologies underlying this technology. [2.5 marks]
- e) Describe supply chain management systems. [2 marks]

Question 3 [15 marks]

- a) Discuss the four major threats to wireless networks. [4 marks]
- b) Differentiate between pure and partial electronic commerce. [1 mark]
- c) Discuss the 2 advantages and 2 disadvantages of telecommuting for both employers and employees. [4 marks]
- d) Discuss the gap in organizations between business personnel and IT personnel. [0.5 mark]
- e) Differentiate between real-time information and real-time system. [0.5 mark]
- f) Discuss 5 characteristic of quality information. [5 marks]

Question 4 [10 marks]

- a) Write the general structure of a HTML document. [2 marks]
- b) Write the HTML tag to insert an image (abc.jpeg) into a webpage. [0.5 mark]
- c) Write the HTML tag to create a link to www.google.com website. [0.5 mark]
- d) What is the major disadvantage of GEO satellites? [0.5 mark]
- e) Internet over Satellite (IoS) uses which type of satellite? [0.5 mark]
- f) Describe EDI and Extranets. [2 marks]
- g) Describe customer relationship management systems. [2 marks]
- h) Differentiate between a browser and a protocol. [1 mark]
- i) Differentiate between primary key and secondary key. [1 mark]

Question 5**[20 marks]**

- a) What is an entity? [0.5 mark]
- b) Write at least two advantages and two disadvantages of relational databases? [2 marks]
- c) State at least three benefits of data dictionaries? [1.5 marks]
- d) Differentiate between data warehouses and data marts. [2 marks]
- e) Identify and explain the major difficulties involved in managing data. [2 marks]
- f) Explain data governance in your own words. [2 marks]
- g) What is a functional area information system? List its major characteristics. [1 mark]
- h) Differentiate among B2C, B2B, C2C, and B2E electronic commerce. [4 marks]
- i) Discuss forward and reverse auctions. [1 mark]
- j) Briefly differentiate among vertical exchanges, horizontal exchanges, and functional exchanges. [3 marks]
- k) Describe electronic storefronts and cybermall. [1 mark]

End of Exam