



Kasarani Campus
Off Thika Road
Tel. 2042692 / 3
P. O. Box 49274, 00100
NAIROBI
Westlands Campus
Pamstech House
Woodvale Grove
Tel. 4442212
Fax: 4444175

KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
FOR THE BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
KIT 2102 – INFORMATION SYSTEM FUNDAMENTALS

Date: 06TH December 2024
Time: 2:30PM – 4:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

Apple Merging Technology, Business, and Entertainment

This might sound hard to believe, but a bit more than a decade ago, Apple was on the brink of bankruptcy. Apple Computer Inc., now back from near oblivion, is blazing a trail through the digital world with innovation and creativity that has been missing from the company for the past 20 years. The unique feature of Apple's competitive advantages is that they come from customers and users, not Apple employees. That's right; the company welcomes products created by consumers to sell to consumers, a trend new to business. Capitalizing on the iPod With millions of iPods in the hands of consumers, many people are finding ways to capitalize on the product. John Lin created a prototype of a remote control for the iPod and took his prototype to Macworld, where he found success. A few months later, Lin's company had Apple's blessing and a commitment for shelf space in its retail stores. —

This is how Apple supports the iPod economy, Lin said. In the iPod-dominated market, hundreds of companies have been inspired to develop more than 500 accessories—everything from rechargers for the car to \$1,500 Fendi bags. Eric Tong, vice president at Belkin, a cable and peripheral manufacturer, believes that 75 percent of all iPod owners purchase at least one accessory—selling over 30 million accessories to date. With most of the products priced between \$10 and \$200, that puts the iPod economy well over \$300 million and perhaps as high as \$6 billion. Popular iPod accessories include:

Altec Lansing Technologies—iPod speakers and recharger dock (\$150).

Belkin—TuneCast mobile FM transmitter (\$40).

Etymotic Research—high-end earphones (\$150).

Griffin Technology—iTrip FM transmitter (\$35).

Kate Spade—Geneva faux-croc mini iPod holder (\$55).

Apple—socks set in six colors: green, purple, blue, orange, pink, and gray (\$29). Apple—digital camera connector (\$29).

Capitalizing on the iPhone

Looking at someone using an iPhone is an interesting experience because there is a good chance they are not making a phone call. They could be doing a number of things from playing a game to trading stocks, watching a TV show, or even conducting business with a mobile version of salesforce.com's customer-management software. In a brilliant strategic move, Apple let outsiders offer software for the iPhone and in less than six months, more than 10,000 applications had been created. In fact, more than 15,000 applications are available at its app store section of iTunes, and they have been downloaded a total of 500 million times. Now, many of the

iPhone apps are available for the iPad. The iPhone and iPad app store market is getting so huge relative to other smartphone markets that some developers argue there is little point adapting applications for Google's

Android or any other iPhone competitor. According to Jeff Holden, CEO of Pelago Inc., when he created his social networking company he fully intended to follow the conventional wisdom for how to build a sizable, fastgrowing software company: Get your programs on as many platforms and devices as possible. But when he crunched the numbers he came to an interesting business conclusion: The 13 million iPhone owners had already downloaded more applications than the 1.1 billion other cell phone owners! To entrepreneurs, developing a program for the iPhone automatically provides a significantly larger market—almost 94 times larger than its competitors. —Why would I ever build for anything but the iPhone?¶ Holden asked

- a) What are three advantages of this enterprise systems the Apple Company [3 Marks]
- b) Explain how Apple achieved business success through the use of information, information technology, and people [5 Marks]
- c) Discuss five Fair Information Practice principles [5 Marks]
- d) Distinguish between the following terms used in organizations;
 - i) Mission and vision statement [2 Marks]
 - ii) Key indicator report and drill-down report [2 Marks]
- e) Explain any six critical success factors to be considered in an organization [6 Marks]
- f) With the aid of a diagram, describe the components of a Management Information System[3 Marks]
- g) State any four guidelines for end-user development of applications [4 Marks]

QUESTION TWO (20 MARKS)

- a) Explain any three emergent or response strategies that can be used by organizations to achieve competitive advantage [3 Marks]
- b) With the aid of diagrams, differentiate between centralized and decentralized organization of the Information System function. [4 Marks]
- c) List five of the most common biometric controls [5 Marks]
- d) Explain four economical and four social factors that affect change in organizations. [8 Marks]

QUESTION THREE (20 MARKS)

With the advent of science and technology, technological innovations have become a pre-requisite to achieve operational and strategic excellence. Organizations by using state-of-the-art systems, are striving for their best to achieve sustainable and long-term competitive advantage. It has become sine qua non to use modern tools for the effective achievement of goals and objectives. Its importance can also be observed from the increased spending on Research & Development in order to pace up with the todays dynamic business environment. WalMart, founded by Sam Walton in 1962, is the world's largest retailer that employs about 2.1 million associates worldwide, in more than 8,400 stores, including 8, discount stores, 3,100 combination discount and grocery stores. Wal-Mart's investment in technology started with the computerized accounting systems and since then the continuous adoption of latest technologies has made Wal-Mart a market leader in the whole retail industry. WalMart developed a well-equipped computerized Point of Sale (POS) system capable of identifying each unit sold, creation of accurate sales receipt and storing all the information itemby-item for sales analysis and inventory reordering purposes. It helped company to avoid overstocking of merchandize through effective information usage and also assisted them in investing in only those merchandize that were profitable. It has also helped them figure out best selling products and prospective products that customers want.

- a) Explain five IT and IS factors to be considered when acquiring an Application Services Provider [5 Marks]
- b) Distinguish between ethics and laws governing this point of sale [3 Marks]
- c) Explain any four risks of licensed software [4 Marks]
- d) Outline four advantages of a Service Level Agreement (SLA) [4 Marks]
- e) Summarize any four shared features of most organizations [4 Marks]

QUESTION FOUR (20 MARKS)

- a) Outline four risk mitigation strategies [4 Marks]
- b) With the aid of a block diagram, explain the competitive forces model that organizations may use to counter competitive forces [10 Marks]
- c) According to the value chain model (Porter, 1985) the activities conducted in any ganization can be divided into two parts; primary activities and support activities. Outline three primary activities and three support activities. [6 Marks]

QUESTION FIVE (20 MARKS)

Katito Polytechnic University has several employees and requires a payroll system.

- a) Describe three roles and importance of this system to the institution. [4 Marks]
- b) Explain three advantages and disadvantages of this system to the institution [6 Marks]
- c) Explain the concept of Information, using examples [4 Marks]
- d) Differentiate between a manual information system and a computerized information system [6 Marks]