Question **1**

Not answered

Marked out of 1.00

Flag question

Question text

Question 11
Which of the following represents the three goals of information security?

Select one:

a.

Confidentiality, integrity, and availability

b.

Network security, PC security, and mainframe security

c.

People controls, process controls, and technology controls

d.

Prevention, detection, and response

Feedback

The correct answer is: Confidentiality, integrity, and availability

Question **2**

Not answered

Marked out of 1.00

Flag question

Question text

A firm can exercise greater control over its suppliers by having

Select one:

a.

local suppliers.

b.

more suppliers.

c.

global suppliers.

d.

regional suppliers.

e.

fewer suppliers.

Feedback

The correct answer is: more suppliers.

Question **3**

Not answered

Marked out of 1.00

Flag question

Question text

The three activities in an information system that produce the information organizations use to control operations are

Select one:

a.

data analysis, processing, and feedback.

b.

data, information, and analysis.

c.

input, output, and feedback.

d.

input, processing, and output.

e.

information retrieval, research, and analysis.

Feedback

The correct answer is: input, processing, and output.

Question **4**

Not answered

Marked out of 1.00

Flag question

Question text

_____ states that the value or power of a network grows exponentially as a function of the number of network members.

Select one:

a.

Moore's Law

b.

Law of scalability

c.

Law of networks

d.

Metcalfe's Law

e.

Law of outsourcing

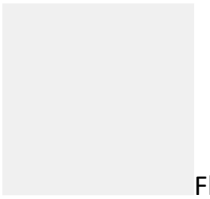
Feedback

The correct answer is: Metcalfe's Law

Question **5**

Not answered

Marked out of 1.00


Flag question

Question text

Information _____ exists when one party in a transaction has more information that is important for the transaction than the other party.

Select one:

a.

Imbalance

b.

Complexity

c.

Discrimination

d.

Asymmetry

e.

Transparency

Feedback

The correct answer is: Asymmetry

Question **6**

Not answered

Marked out of 1.00

Flag question

Question text

In the information age, the obligations that individuals and organizations have regarding the preservation of existing values and institutions fall within the moral dimension of:

Select one:

a.

family and home.

b.

quality of life.

c.

system quality.

d.

property rights and obligations.

e.

accountability and control.

Feedback

The correct answer is: quality of life.

Question **7**

Not answered

Marked out of 1.00

 Flag question

Question text

Which of the following statements regarding information security is true?

Select one:

a.

Process controls for IT security include separation of duties.

b.

Process controls for IT security include assignment of roles for least privilege.

c.

All of the above

d.

Process controls for IT security include documented procedures.

Feedback

The correct answer is: All of the above

Question **8**

Not answered

Marked out of 1.00

Flag question

Question text

When a firm buys on the marketplace what it cannot make itself, the costs incurred are referred to as

Select one:

a.

Transaction costs.

b.

Sales costs.

c.

Network costs.

d.

Agency costs.

e.

Switching costs.

Feedback

The correct answer is: Transaction costs.

Question **9**

Not answered

Marked out of 1.00

Flag question

Question text

Firms use a _____ strategy to provide a specialized product or service for a narrow target market better than competitors.

Select one:

a.

process efficiency

b.

low-cost leadership

c.

mass customization

d.

market niche

e.

product differentiation

Feedback

The correct answer is: market niche

Question **10**

Not answered

Marked out of 1.00

Flag question

Question text

An example of a business using information systems to create new products and services is

Select one:

a.

the San Francisco Giants play tracking system.

b.

the Mandarin Oriental hotel's customer-preference tracking system.

c.

Apple Inc.'s iPod.

d.

Wal-Mart's RetailLink system.

e.

Verizon's Web-based digital dashboard.

Feedback

The correct answer is: Apple Inc.'s iPod.

Question **11**

Not answered

Marked out of 1.00

Flag question

Question text

Question 7
The process of presenting a set of computing resources (such as computing power or data storage), so that they can all be accessed in ways that are not restricted by physical configuration or geographic location is called

Select one:

a.

multicore processing.

b.

autonomic computing.

c.

virtualization.

d.

cloud computing.

e.

ubiquitous computing.

Feedback

The correct answer is: cloud computing.

Question **12**

Not answered

Marked out of 1.00

Flag question

Question text

Question 12
A Trojan horse

Select one:

a.

Installs spyware on users' computers.

b.

Is software that appears to be benign but does something other than expected.

c.

Is a virus that replicates quickly.

d.

Is a type of sniffer used to infiltrate corporate networks.

e.

Is malware named for a breed of fast-moving Near-Eastern horses.

Feedback

The correct answer is: Is software that appears to be benign but does something other than expected.

Question **13**

Not answered

Marked out of 1.00

Flag question

Question text

The effort required to locate a suitable product is called

Select one:

a.

Menu costs.

b.

Shopping costs.

c.

Price discrimination.

d.

Location costs.

e.

Search costs.

Feedback

The correct answer is: Search costs.

Question **14**

Not answered

Marked out of 1.00

Flag question

Question text

Question 10
Online Analytical Processing (OLAP) is a tool for enabling

Select one:

a.

programmers to quickly diagram data relationships.

b.

users to quickly generate summary reports.

c.

users to view both logical and physical views of data.

d.

programmers to normalize data.

e.

users to obtain online answers to ad-hoc questions in a rapid amount of time.

Feedback

The correct answer is: users to obtain online answers to ad-hoc questions in a rapid amount of time.

Question **15**

Not answered

Marked out of 1.00

Flag question

Question text

What is the greatest barrier to successful business process change?

Select one:

a.

Organizational change

b.

Ineffective project management

c.

Poor choice of technology

d.

Selecting the correct process to change

e.

Usability of implemented solution

Feedback

The correct answer is: Organizational change

Question **16**

Not answered

Marked out of 1.00

Flag question

Question text

Question 15
Compared to traditional goods, digital goods incur

Select one:

a.

Lower distribution costs.

b.

Less disintermediation.

c.

Higher marginal costs per unit.

d.

Similar inventory costs.

e.

Equivalent copying costs.

Feedback

The correct answer is: Lower distribution costs.

Question **17**

Not answered

Marked out of 1.00

Flag question

Question text

The role of entrepreneur falls into which of Mintzberg's managerial classifications?

Select one:

a.

interpersonal

b.

communicative

c.

symbolic

d.

informational

e.

decisional

Feedback

The correct answer is: decisional

Question **18**

Not answered

Marked out of 1.00

Flag question

Question text

Netflix's public announcement of a reward for a technology solution to its movie recommendation system is an example of

Select one:

a.

social shopping.

b.

long-tail marketing.

c.

prediction markets.

d.

behavioral targeting.

e.

crowdsourcing.

Feedback

The correct answer is: crowdsourcing.

Question **19**

Not answered

Marked out of 1.00

Flag question

Question text

All of the following are considered disruptive technologies except

Select one:

a.

PCs.

b.

Voice Over IP (VOIP).

c.

Smartphones.

d.

Instant messaging.

e.

3D Printers.

Feedback

The correct answer is: Instant messaging.

Question **20**

Not answered

Marked out of 1.00

Flag question

Question text

Question 3
The use of information systems because of necessity describes the business objective of

Select one:

a.

operational excellence.

b.

improved flexibility.

c.

competitive advantage.

d.

improved business practices.

e.

survival.

Feedback

The correct answer is: survival.

Information

Flag question

Information text

Part B:

5 Short Answer Questions

Attempt every question

4 Marks Each | Total 20 Marks.

Question **21**

Not answered

Marked out of 4.00

Flag question

Question text

SHORT ANSWER SECTION | 4 Marks for each question

Identify the five moral dimensions that are involved in political, social, and ethical issues and briefly describe each. (2 Marks)

Of these, which do you think is the most difficult for society to deal with? Explain your opinion. (2 Marks)

Question **22**

Not answered

Marked out of 4.00

Flag question

Question text

SHORT ANSWER SECTION | 4 Marks for each question

Your aunt has asked you for your suggestions to make her business, a local sandwich shop, more efficient.

Describe three types of business processes a sandwich shop has. (3 Marks)

Describe how one of these business processes may be better coordinated through the use of information systems? (1 Mark)

Question **23**

Not answered

Marked out of 4.00

Flag question

Question text

SHORT ANSWER SECTION | 4 Marks for each question

You have been hired by a national furniture leasing company to implement its first business intelligence systems and infrastructure. To prepare for your initial report, describe the types of data in their firm they can use to support business intelligence and the systems that you will implement to support both their power users and casual users, and explain how these systems or tools work together. (4 Marks)

Question **24**

Not answered

Marked out of 4.00

Flag question

Question text

SHORT ANSWER SECTION | 4 Marks for each question

Customer Relationship Management, Supply Chain Management, and Enterprise Systems are all major enterprise applications. Select two of these enterprise applications and give detailed explanations of each, describing examples of their use in organizations you are familiar with. (4 Marks)

Question **25**

Not answered

Marked out of 4.00

Flag question

Question text

SHORT ANSWER SECTION | 4 Marks for each question

What is knowledge management?

Could a company like a taxi service benefit from knowledge management?

Which of the following knowledge systems would the taxi service use? Give an example.

- Enterprise-wide knowledge management systems,
- Knowledge work systems,
- Intelligent techniques? (4 Marks)

Information

Flag question

Information text

Part C:

4 Extended Response Questions

Answer THREE (3) Questions from the FOUR (4) Questions provided .

20 Marks Each | Total 60 Marks

NB. If you choose to answer all four questions, then your grade for this section will comprise the highest three marks.

Question **26**

Not answered

Marked out of 20.00

Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Business Strategy

a. Define and describe a business ecosystem. (4 Marks)
Describe how Apple's App Store functions as a business ecosystem. (4 Marks)

b. How is Internet technology useful from a network economics perspective? (2 Marks)
Give two (2) detailed examples. (10 Marks)

Feedback

a. **Business Ecosystem**

A business ecosystem is a collection of loosely coupled but interdependent industries (suppliers, distributors, technology manufacturers, etc.) that provides related services and products. It is similar to a value web, except that cooperation takes place across many industries rather than many firms. Business ecosystems can be characterized as having one or a few keystone firms that dominate the ecosystem and create the platforms used by other niche firms. Keystone firms in the Microsoft ecosystem include Microsoft and technology producers such as Intel and IBM. Niche firms include thousands of software application firms, software developers, service firms, networking firms, and consulting firms that both support and rely on the Microsoft products.

Another example of a business ecosystem is the mobile Internet platform. In this ecosystem there are four industries: device makers (Apple iPhone, RIM BlackBerry, Motorola, LG, and others), wireless telecommunication firms (AT&T, Verizon, T-Mobile, Sprint, and others), independent software applications providers (generally small firms selling games, applications, and ring tones), and Internet service providers (who participate as providers of Internet service to the mobile platform).

b. **Network Economics**

In network economics, the cost of adding a participant in the network is negligible, while the gain in value is relatively much larger. The Internet itself is an example of a successful implementation of network economics—the more people participate, the more valuable and essential a commodity it is.

When Microsoft provides a service through the Internet such as a project management application (Microsoft Project), the costs to the company of adding another user are small (as the software infrastructure or application is already built), and the more users are signed up, the more profit is made. In this case Microsoft aims to develop and deploy a core product offering Microsoft Project Standard and package this with other software, driving adoption and lowering distribution costs. As usage increases and the package matures, Microsoft continues to receive income for a software package that has already been developed and – largely – paid for. Microsoft can then allocate this revenue to other software projects or into developing MS Project into new MS Project Professional, etc…

Another example is eBay, the giant online auction website. The value of eBay lies in the number of active members; the more people who offer products on eBay, the more valuable eBay.com – and its subsidiaries – become to all existing users, the more compelling it is as a platform for potential users, and the lower the unit-cost of providing the service becomes. Moreover, as usage increases, the increase in value to existing users becomes a form of ‘lock in’ where business strategies built around the supply of goods through eBay – at cost bases made possible by the large volume of sales – would not work at other sites.

Question **27**

Not answered

Marked out of 20.00

Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Information Security

a. How can a firm's security policies contribute and relate to the following six main business objectives? :

- Operational Excellence
- New Products, Services, Business Models
- Customer and Supplier Intimacy
- Improved Decision Marking
- Competitive Advantage
- Survival (12 Marks)

b. Give an example of each. (6 Marks)

c. Select one of your examples and explain way it is the most important business objective for the firm to focus on. (2 Marks)

Feedback

1. Operational excellence:
   Security policies are essential to operational excellence. A firm's daily transactions can be severely disrupted by cybercrime such as hackers. A firm's efficiency relies on accurate data. In addition, information assets have tremendous value, and the repercussions can be devastating if they are lost, destroyed, or placed in the wrong hands.
   Sony was forced to suspend its PlayStation Network (PSN) for approximately a month following a data breach in 2011.
2. New products, services, business models.
   Security policies protect a company's ideas for new products and services, which could be stolen by competitors. Additionally, enhanced security could be seen by a customer as a way to differentiate your product.
   Website **macrumors.com** is one of several website publishing leaked and speculative data regarding Apple's products. Often, the value is in the assembled information – as was seen in

Mac Rumor's predictions about iPhone 8 cases leading up to the phone's official release in September 2017.

3. Customer and supplier intimacy:
   Customers rely on your security if they enter personal data into your information system, for example, credit card information into your e-commerce site. The information you receive from customers and suppliers directly affects how able you are to customize your product, service, or communication with them.
   In 2013, **Adobe.com** was breached leaking millions of Adobe.com (and Creative Catalyst) accounts, including username, email, encrypted password and password hint.

4. Improved decision making:
   Secure systems make data accuracy a priority, and good decision making relies on accurate and timely data. Lost and inaccurate data would lead to compromised decision making.
   Evian Water built a Water Testing System that relied on automated quality monitoring by checking for 'error flags' produced by a number of sub-systems. When an inline water purity testing sub-system failed, it was not able to generate and pass up an error message, causing a False-Positive in the Water Testing System. Unchecked bottles were sold assuming they had been checked. Evian had to recall the affected product.

5. Competitive advantage:
   The knowledge that your firm has superior security than another would, on an otherwise level playing field, make your firm more attractive to do business with. Also, improved decision-making, new products and services, which are also affected by security (see above), will contribute to a firm's competitive advantage. Strong security and control also increase employee productivity and lower operational costs.
   Google mail servers (collectively Gmail) are marketed as a safe and secure alternative for a core business service. Google relies on market perception their services are more secure than competitors when selling G Suite (formally Google Apps) as a white-labelled service to businesses.

6. Survival:
   New laws and regulations make keeping your security system up to date a matter of survival. Inadequate security and control may result in serious legal liability. Firms have been destroyed by errors in security policies.
   DigiNotar was a Dutch (InfoSec) certificate authority until a data breach in 2011 cause the fraudulent issuing of certificates. Shortly afterwards the Dutch Government took control of the company and filed for its bankruptcy within a month.

Question **28**

Not answered

Marked out of 20.00

Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Operationalising Databases

Database technologies can be used to assist a firm to achieve various commercial strategies.

a. Describe two different database technologies that could be used by an office stationery supply company to achieve low-cost leadership. (10 Marks)

b. Describe two different database technologies that could be used by a toy manufacturer to achieve product differentiation. (10 Marks)

Feedback

a. Sales databases could be used to make the supply chain more efficient and minimize warehousing and transportation costs. You can also use sales databases, as well as text mining and sentiment analysis, to determine what supplies are in demand by which customers and whether needs are different in different geographical areas.
Business intelligence databases could be used to predict future trends in office supply needs, to help anticipate demand, and to determine the most efficient methods of transportation and delivery.

b. Product databases could be made available to customers for greater convenience and ordering online. Databases could be used to track customer preferences and to help anticipate customer desires. Sales databases could also help clients such as toy stores anticipate when they would need to re-supply, providing an additional service.
Data mining, Web mining, and sentiment analysis of big data could help anticipate trends in sales or other factors to help determine new services and products to sell to clients.

Question **29**

Not answered

Marked out of 20.00

Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Cloud Computing

a. A small design agency you are consulting for will be creating client Web sites and wants to purchase a Web server so they can host the sites themselves. How will you advise them on this purchase? (4 Marks)

b. Explain what IaaS, PaaS, or SaaS cloud computing models are and why each may be more beneficial for the design agency. Include a definition and two (2) advantages and one (1) disadvantage for each model. (12 Marks)

c. Give an example of each of the four (4) computing models (on-premise, IaaS, PaaS, SaaS). (4 Marks)

Feedback

a. They need to understand total cost of ownership: the costs will go beyond the cost of the server, but they will also need to purchase the server software and any application software they will be using. They will also need someone in their IT department to manage and maintain the computers. They will also incur facilities costs for running the computer. They need to have a backup plan should the server fail. The design agency will need to add up all the potential costs and risks. Additionally, they need to prepare for their plan if they need more servers. Will they eventually have to run and maintain their own server farm? What if one of their clients' sites is more popular than anticipated and the server has difficulty handling the load? How quickly can they add servers or processing power? The company should look at colocation, Web hosting services, and ASPs to see if their needs will be better met this way.

b.

IaaS – Infrastructure as a Service is a cloud computing model where providers offer computing infrastructure – virtual machines and other resources – as a service to subscribers. Typically, hypervisors – such as VMWare or Hyper-V – manage the low-level system resources of each virtual machine or generic resource, enabling customers to scale their usage up or down and allocating costs accordingly.

Amazon Web Services (AWS) and Microsoft Azure are two examples of IaaS providers. Either provider allows users to ‘rent’ individual computing resources (eg. Storage, computing, networking, administrative utilities) – typically on a ‘per hour’ basis. The design agency would ‘spin up’ a computing instance (after configuring the specifications just like when purchasing a physical server) and attach different types of storage, networking and administration utilities to it. They would connect to their new ‘instance’ – just like connecting to their new physical server – and run operating systems and applications on it (just like a physical server).

Advantages include:

- Ability to flexible space – and match scaling costs with scaling revenue.
- Expand to include additional resources as capacity is exhausted.
- Easily differential hosting packages to clients (ie. charge more for faster servers, and less for slower servers)
- Virtualise their hardware provisioning, reducing disaster recovery and simplifying business continuity.
- Operating expense instead of Capital expense.

Disadvantages include:

- Outsourcing provision of a key resource to a third party.
- Pushing technology past where local tech resources may be comfortable maintaining.

PaaS – Platform as a Service is typically – but not always - used as a development environment for application developers. In the PaaS models, providers deliver a computing platform, typically including operating system, programming-language execution environment, database, and web server. The provider typically develops toolkits and standards for development and channels for distribution and payment.

cPanel is an example of a web host utility that web-hosters can deploy for clients. CPanel automatically segments each 'instance' for and provisions for direct access to each individual client to their website and associated assets (emails, files, etc…). It supports installation of third party apps including WordPress, Joomla, etc..

Advantages include:

- Proven and low-cost model that clients can access individually.
- Familiar environment for clients
- Scalable cost as demand (and revenue) grow.
- Operating expense instead of Capital expense.
- Don't need to worry about upgrading cPanel (or equivalent)

Disadvantages include:

- Reliance on 3rd party for provision for a core service.
- Lower margin available to Design Agency compared to a potential deployment of IaaS (as paying an extra supplier)

SaaS – Software as a Service is cloud computing model where providers give users access to application layers (typically software) and databases. Providers then manage the underlying infrastructure and platforms that run those applications. SaaS is sometimes referred to as "on-demand software" and like IaaS and PaaS – is usually priced on a pay-per-use basis or via a subscription fee.

Wordpress.com, Spotify and Squarespace are all examples of SaaS website design packages. Each have portals where web design agencies can attract new clients and manage existing clients' portfolios. Providers charge either the agency or the client directly for ongoing provision of services – which includes patching and ongoing infrastructural maintenance.

Advantage include:

- Highly abstracted product/service so the Design agency can focus on content creation and website design rather than infrastructural provision
- One-stop-shop for all problems – so all patches, infrastructural provisioning etc... is outsourced.
- Typically, a highly developed ecosystem of third party providers agencies can easily outsource portions of work to (either white-labelled or branded).

Disadvantages include:

- Increased vendor lock-in
- Reduced control over cost base