UNIVERSITY OF COLOMBO, SRI LANKA

UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY (EXTERNAL)
Academic Year 2020 – 1st Year Examination – Semester 1

IT1106 – Information Systems
Multiple Choice Question Paper

11th September, 2020
(TWO HOURS)

Important Instructions:

The duration of the paper is **2 (two) hours**.

The medium of instruction and questions is English.

The paper has **40 questions** and **10 pages**.

All questions are of the **MCQ** (Multiple Choice Questions) type.

All questions should be answered.

Each question will have 5 (five) choices with **one or more** correct answers.

All questions will carry **equal** marks.

There will be a penalty for incorrect responses to discourage guessing.

The mark given for a question will vary from 0 (*All the incorrect choices are marked & no correct choices are marked*) to +1 (*All the correct choices are marked & no incorrect choices are marked*).

Answers should be marked on the special answer sheet provided.

Note that questions appear on both sides of the paper.
If a page is not printed, please inform the supervisor immediately.

Mark the correct choices on the question paper first and then transfer them to the given answer sheet which will be machine marked. **Please completely read and follow the instructions given on the other side of the answer sheet before you shade your correct choices.**

All kinds of electronic devices including calculators are **not** allowed.

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1) What are the four major categories that computing hardware devices can be categorized into based on the functions that they can perform?

(a) Input, Editing, Storage, Output

(b) Input, Output, Processing, Storage

(c) Editing, Copying, Pasting, Storage

(d) Entering, Editing, Pasting, Copying

(e) Entering, Saving, Processing, Output

2) Which of the following hardware devices would show the most detailed view of graphical content?

(a) 3D camera

(b) CCTV camera

(c) Very-high resolution display device

(d) Web camera used to record lectures

(e) Airplane's black box

3) Which of the following is/are (a) characteristic(s) of quality information?

(a) Accurate

(b) Complex

(c) Economical

(d) Verifiable

(e) Secure

4) Which of the following statements is/are CORRECT regarding application software?

(a) They allow users to do a specific task such as preparing reports and creating graphs.

(b) They support users to manage computer memory and files.

(c) They are one of the two major types of software.

(d) All types of computers need application software.

(e) They control access to computer system resources.

5) ABC Pvt Ltd is a digital printing company. They bought a new information system to increase the efficiency of order processing. Now, customers can place orders online by choosing the products they want, entering the number of items and delivery address and providing the right identification and payment information. The system generates the invoices for the customer approval and the bill of order. According to the above description, which of the following can be considered as system processes?

(a) Choosing the products

(b) Entering number of items required

(c) Providing the payment information

(d) Generating invoices

(e) Calculating the bill value

6) | Major roles of information systems in business include the support of;

- (a) Business processes and operations
- (b) Business decision making
- (c) Business management and evaluation
- (d) Strategies for competitive advantage
- (e) Transactional data processing

7) | According to Michael Porter's model, a company can successfully face competitive forces to survive and succeed in long runs only if it has developed strategies such as;

- (a) Cost leadership
- (b) Bargaining power of Suppliers
- (c) Threats of new entrants
- (d) Innovation
- (e) Imitation

8) | Careers in an information system (IS) organization can be categorized into three main functional groups as operations, development and support. Which of the following careers belongs to the operations group in an IS organization?

- (a) Database Administrator
- (b) Help Desk Support Specialist
- (c) IS Security Analyst
- (d) System Administrator
- (e) System Analyst

9) | Which of the following statements is/are CORRECT regarding "Shadow IT"?

- (a) It can be an information system, or a solution developed by a non-IT department in an organization.
- (b) It is an information system, or a solution developed by IT experts in an organization.
- (c) It helps business managers to quickly create innovative solutions to real business problems.
- (d) It refers to an information system or computing device deployed in a department without getting approval of the IT department of the organization.
- (e) It is a solution introduced by IT departments in order to quickly test many different software and purchase the ideal solution for the organization.

10) | Which of the following statements is/are CORRECT regarding Business Process Re-engineering (BPR) and Business Process Improvement (BPI)?

- (a) The level of change in BPI is incremental while that in BPR is radial.
- (b) Risks associated with BPI is always higher than the risks associated with BPR.
- (c) BPI aims to make an improved version of the business process while BPR attempts to create a brand-new business process.
- (d) Compared to BPR, BPI can be completed in a shorter time period.
- (e) BPR takes a top-down approach while BPI is a bottom-up approach.

11) *daraz.lk, ikman.lk* are two (2) different types of e-commerce applications. Which of the following options lists the types of e-commerce applications in the order they have been listed above?

(a) C2C, B2B	(b) B2C, C2C	(c) B2B, B2C
(d) C2B, B2B	(e) B2C, C2B	

12) Which of the following statements is/are CORRECT regarding e-commerce?

(a) It is the process of buying and selling products or services via wireless handheld devices.

(b) All or most of the transactions take place online.

(c) It enables users to make transactions from anywhere if they are connected to the Internet.

(d) Both retail and wholesale can be conducted through e-commerce.

(e) e-Commerce applications can support manufacturing companies to reduce the inventory.

13) Which of the following statements is/are CORRECT regarding online bartering?

(a) It is about buying and selling products or services online.

(b) It can support reducing excess inventory.

(c) This approach speeds up the movement of finished products to the customer.

(d) Tax-calculations and accounting are no-longer required.

(e) The risk of handling money is solved.

14) The types of mobile ad networks include;

(a) Blind network	(b) normal network	(c) Premium network
(d) Premium blind network	(e) Cost per click network	

15) XYZ is a dried fruit packaging company. Their existing web site provides information related to types of dried fruits and different sizes of packs they have. They wish to improve their web site aiming to attract more customers to it and meet the customer requirements more efficiently.

Which of the following activities can be performed for this purpose?

(a) Add new content to the Web site on a regular basis

(b) Include meta tags in the home page of the Web site.

(c) Add links to other reputable Websites having similar products.

(d) Use web site traffic data analysis software

(e) Incorporate personalization techniques to capture customer data and build individual profiles.

16) Which of the following statements is/are CORRECT regarding Enterprise Resource Planning (ERP) systems?

- (a) They have a shared database of key operational and planning data.
- (b) They can replace all other transactional processing systems in the organization.
- (c) They can provide support for business analytics and e-business.
- (d) They provide integrated real-time views of all business processes of the company.
- (e) They can be developed and implemented more quickly than any other business information system.

17) A typical cloud-based Enterprise Resource Planning (ERP) systems can provide lots of benefits such as;

- (a) Safe access to data from anywhere on any device.
- (b) Conduct security checks and take immediate action on threats.
- (c) System offerings can be scaled up or down to meet the business need.
- (d) Reduce infrastructure requirement and cost of information system management.
- (e) Possibility of easy customization and adaption by the end-users.

18) RaviSandu is a clothing manufacturing company which has more than 400 stores spread across Sri Lanka and a few other countries. They find it difficult to maintain all the stores and wish to close some stores in order to reduce costs. However, they do not like to lose their 200 suppliers and customers. As a solution, the company is planning to introduce a new information system. This system should link suppliers, retailers and customers and monitor production. As a result, the company will be able to quickly deliver new and stimulating products to customers and the management will be able to monitor the process and take necessary actions immediately.

Which of the following is the most appropriate type for the new information system?

- (a) Customer Relationship Management system
- (b) Management Information System
- (c) Supply Chain Management System
- (d) Order processing system
- (e) Transaction Processing System

19) Consider the following characteristics of an information system.

- i. Addresses decisions requiring judgment, evaluation, and insight
- ii. Handles routine operations associated with business processes
- iii. Receives data from lower-level systems and external sources

Which of the above characteristics is/are CORRECT regarding Executive Support Systems?

- (a) Only i
- (b) Only ii
- (c) Only iii
- (d) Only i and iii
- (e) Only ii and iii

20) Which of the following is/are cross-functional systems?

- (a) Transaction Processing System
- (b) Management Information System
- (c) Enterprise Resource Planning System
- (d) Knowledge Management System
- (e) Customer Relationship Management system

21) | Which of the following is/are (a) key feature(s) of Customer Relationship Management System?

    (a) Marketing automation   (b) Social networking

    (c) Analysis   (d) Linking customers to the suppliers

    (e) Managing all relationships of the customers

22) | A typical Business Intelligence System can provide lots of benefits such as_____ to any business organization.

    (a) Automatic decision making

    (b) Easy preparation of reports

    (c) Promote sharing expert knowledge

    (d) Enhance visualization information

    (e) In-depth analysis of data

23) | Which of the following can be considered as (a) feature(s) of a common business intelligence (BI) tool?

    (a) Paraphrasing

    (b) Querying

    (c) Business process management

    (d) Process mining

    (e) Digital dashboards

24) | Which of the following statements is/are CORRECT regarding "Word Cloud"?

    (a) It is a data visualization technique.

    (b) It is a cloud network used to share Word documents.

    (c) It is another term used for "conversion funnel".

    (d) It can be generated by analyzing text documents or web pages.

    (e) It helps to send data quickly and securely.

25) | The main purpose(s) of using online analytical processing systems is/are to;

    (a) Analyze archived data.

    (b) Show the current trends.

    (c) Select and discard unnecessary data.

    (d) help identifying issues and opportunities.

    (e) analyze multidimensional data from many different perspectives.

26) Consider the following statements and terms listed under column A and column B.

A	B
i. Support non-technical end users to take decisions based on facts and analyses.	i. Slicing and dicing
ii. Perform to analyze trends and find time-based patterns.	ii. Marketing and sales analysis
iii. A business area where online analytical processing can solve complex problems.	iii. Self-service analytics

Which of the following correctly matches the statements under column A with the terms under column B?

(a) A(i)-B(i), A(ii)-B(ii), A(iii)-B(iii)

(b) A(i)-B(ii), A(ii)-B(iii), A(iii)-B(i)

(c) A(i)-B(iii), A(ii)-B(ii), A(iii)-B(i)

(d) A(i)-B(iii), A(ii)-B(i), A(iii)-B(ii)

(e) A(i)-B(i), A(ii)-B(iii), A(iii)-B(ii)

27) Which of the following is/are NOT (a) common software acquisition option(s)?

(a) Build (b) Borrow (c) Buy

(d) Lease (e) Grid Computing

28) Which of the following statements is/are TURE regarding building custom applications as a method of acquiring software?

(a) The software can be acquired and deployed very quickly compared to all other methods.

(b) The software service provider takes care of necessary updates and maintenances.

(c) It might take months or years to make the software ready to deploy.

(d) Cost of acquisition would be high compared to buying.

(e) Most likely to be the best for meeting stakeholder requirements.

29) What are the three (3) ways that an information system can add value to an organization?

(a) Gathering, Processing, Generating

(b) Automating, Informating, Strategizing

(c) Gathering, Automating, Processing

(d) Reading, Learning, Writing

(e) Strategizing, Reading, Generating

30) Following are phases in the e-business innovation cycle. They are not in the correct order.

A. Assessing value
B. Choosing enabling/emerging technologies
C. Executing business innovation for growth
D. Matching technologies to opportunities

What is the correct order of phases in the e-business innovation cycle?

(a) D, C, B, A	(b) C, D, A, B	(c) A, B, D, C
(d) A, C, B, D	(e) B, D, C, A	

31) Following is a list of unorganized steps in the package evaluation phase of a software package implementation process. Organizations go through these steps in order to make sure that they purchase the most appropriate off-the-shelf software to meet their needs.

A. Make selection.
B. Research top contenders.
C. Perform final evaluation of leading solutions.
D. Finalize contract.
E. Select top contenders.
F. Identify potential solutions

What is the correct order of the steps above?

(a) A, C, B, E, D, F	(b) E, B, F, A, C, D	(c) A, E, D, F, B, C
(d) B, E, A, F, D, C	(e) F, E, B, C, A, D	

32) SiniDu is a leading private company in manufacturing sports equipment. Ever since its inception, the company has been conducting almost all the core business processes manually. Recently, the company decided to develop an information system to support at least their internal activities. They have an information technology division and they are willing to learn new technologies. However, the company has several issues such as having inadequate internal expertise or a talent pool to develop the software in-house and the top management's discomfort with new technologies.

What would be the best solution to meet the above software requirement?

(a) Outsourcing
(b) In-sourcing
(c) Co-sourcing
(d) Off shoring
(e) On-sourcing

33) Which of the following can be considered as (a) common computer-related mistake(s)?

(a) Mishandling of computer output
(b) Data entry/capture errors
(c) Data alteration by a virus attack
(d) Formatting a disk by mistake
(e) Installing pirate software

34) | XZX is a software development company. They have more than 100 staff members. The staff used to work in groups that includes both members working remotely (online) as well as in the office. The company needs to prepare a set of policies and procedures to prevent computer related waste and mistakes.

Which of the following can be included in the list prepared for the above purpose?

> (a) Reduce the time spent on computers as much as possible.
>
> (b) Reuse the computers as long as possible and never dispose them.
>
> (c) Take print outs of all entered data to double check for mistakes.
>
> (d) Take backups regularly and store them both online and offline.
>
> (e) Shut down all computers and unplug all electrical devices at the end of the day.

35) | Following is a set of unorganized activities to be done to prevent computer related waste and mistakes.

A. Make people aware of proper use and maintenance of information systems and resources.
B. Review existing policies and procedures to identify necessary improvements to be done.
C. Conduct audits to track the amount of time workers have used computers for non-work-related activities.
D. Establish policies and procedures to acquire, use and dispose information systems and devices.

Which of the following lists the activities in the correct order that they should be conducted?

> (a) A, B, D, C   (b) A, C, B, D   (c) B, A, D, C
>
> (d) D, A, C, B   (e) C, A, D, B

36) | An individual who attacks a computer system or network mainly for the purpose of financial gain is called as a;

> (a) Cracker
>
> (b) Hacktivist
>
> (c) Cyber Terrorist
>
> (d) Cyber Criminal
>
> (e) Industrial Spy

37) | Which of the following statements is/are CORRECT regarding viruses and worms?

> (a) Trojan Horse is a virus.
>
> (b) Both Virus and Worm can replicate itself.
>
> (c) Logic Bomb is a worm.
>
> (d) Worms can propagate without human intervention.
>
> (e) A virus can spread to another machine when a computer user shares an infected file.

38) | Rootkit is a malware that;

> (a) deletes information from a computer.
>
> (b) makes it impossible to run some applications, such as Microsoft Word.
>
> (c) makes the network activities function extremely slowly.
>
> (d) enables intruders to gain administrator-level access to other's computers.
>
> (e) can actively hide itself or any information that could indicate its presence.

39) | "Smishing" is a kind of?

> (a) Phishing   (b) Vishing   (c) Spam
>
> (d) Scam   (e) Zombie

40) | Which of the following can be recommended for computer users in order to avoid computer-related health problems?

> (a) Keep the wrists nearly straight.
>
> (b) Drink some tea or coffee while working.
>
> (c) Place arms nearly perpendicular to the floor.
>
> (d) Make sure that top of the monitor is at the user's eye level.
>
> (e) Place the monitor 20 to 26 inches away from the CPU.

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