(55) INFORMATION MANAGEMENT & APPLICATION IN BUSINESS

Time: 03 hours

• Instructions to candidates:
  (1) This paper consists of two (02) Sections A & B.
  (2) Five (05) questions should be answered as follows:
      • Question No.01 of Section A
      • Any four (04) questions from Section B
  (3) Answers should be in the medium applied for, in the booklets provided.
  (4) 100 Marks.

SECTION - A
Multiple Choice Questions
Answer all questions of this Section
40 marks

01. Select from (1), (2), (3) and (4) the most correct answer to each of the following questions. Write the number of the selected answer in your answer booklet with the English letter assigned to the question.

(A) Which one of the following can be considered as a sub discipline of Information Technology?
   (1) Computing Technology.  (2) Business Management
   (3) Accounting.  (4) Chemistry

(B) The type of information used for unstructured problems and situations such as launching a new product is better known as:
   (1) Operational Information.  (2) Tactical Information.
   (3) Internal Information.  (4) Strategic Information.

(C) When a person uses an Automated Teller Machine (ATM), which one of the following Information Systems would he be accessing?
   (1) Production Information System of a Factory.
   (2) Banking Information System of a Bank.
   (3) Student Information System of a University.
   (4) Retail Information System of a Supermarket.

(D) When a customer applies for a loan, a bank manager may study a report of the customer’s current transactions with the bank before approving the loan. This type of MIS report can be identified as a/an:
(E) SAP and Oracle e-Business Suite are examples for which of the following category of software?

(1) Spreadsheet Software.  (2) Enterprise Resource Planning Software.  
(3) Database Management Software. (4) Desktop Publishing Software.

(F) Select from the following, the storage device with the highest capacity:

(1) Floppy Disk.  (2) Blue Ray Disk. 
(3) DVD Disk.  (4) Compact Disk.

(G) 1,048,576 bytes is equivalent to:

(1) 1 Megabyte. (2) 2 Megabits. (3) 1 Gigabyte. (4) 2 Gigabits.

(H) A popular manufacturer of processors used in desktop computers is:

(1) Microsoft. (2) Adobe.  
(3) Google. (4) Intel.

(I) In a Digital Camera or Camera Phone purchased, the resolution (quality) of the camera is indicated in:

(1) Megabytes (2) Megahertz (3) Megapixels (4) Megabits

(J) "Android OS" is an operating system used on which of the following category of computers?

(1) Super Computers. (2) Smart Phones. 
(3) Routers. (4) Mainframe Computers.

(K) Insert New Slide, View Slide Show and Slide Layout are features pertaining to which of the following type of Application Software?

(1) Word Processor. (2) Presentation Assistant.  
(3) Accounting Software. (4) Web Browser.

(L) The following diagram depicts a chart prepared using a popular spreadsheet application.

![Chart Diagram]

The above chart type is known as:

(1) Column Chart. (2) Pie Chart.  
(3) Scatter Diagram. (4) Line Chart.
(M) A standard language used for creating and querying relational databases is:

(1) Java  (2) Visual Basic  (3) SQL  (4) C++

(N) The following symbol displayed on the right is used in Mobile phones and Laptops to denote:

(1) Password protected files.  (2) Battery Charging.  (3) Bluetooth Communication.  (4) Camera Recording.

(O) In the URL of the Association of Accounting Technicians - www.aatsl.lk, "lk" denotes:


(P) Recently several government websites were defaced by unknown persons. This process of gaining illegal entry into computer systems is often referred to as:

(1) Hacking.  (2) Flaming.  (3) Spamming.  (4) Surfing.

(Q) Select from the following, the most suitable example for a validation check:

(1) Check Digits.  (2) OCR Characters.  (3) Smart Cards.  (4) Passwords.

(R) Kaspersky, AVG, McAfee, Norton, Avira, F-Secure are popular brand names for which of the following types of software?


(S) SSADM is a system development method. It stands for:


(T) When accessing a web page such as www.gov.lk which contains Sinhala or Tamil characters, which one of the following may be useful in order to read the contents properly?

(1) Unicode Typeface.  (2) Two Dimensional Barcodes.  (3) MICR Reader.  (4) Secure Socket Layer (SSL) Certificate.

(02 marks each, Total 40 marks)
SECTION - B
Answer any four (04) questions only from this Section
60 marks

02. (a) Define the term “Information Technology”. (02 marks)
(b) List the five (05) elements which comprise an Information System. (05 marks)
(c) “A Business firm is a system which can be identified as a collection of several sub systems”. Can you agree with this statement? Justify your answer. (03 marks)
(d) Explain the term “System Boundary” using a suitable example with a diagram. (05 marks)
(Total 15 marks)

03. (a) List three (03) limitations of a Computer based Information System. (03 marks)
(b) (i) Briefly explain the tasks performed by a Transaction Processing System (TPS). (03 marks)
(ii) List three (03) examples for Transaction Processing Systems. (03 marks)
(c) “A Management Information System (MIS) has its own data sources and does not need information from a Transaction Processing System (TPS)”. Can you agree with this statement? Justify your answer. (03 marks)
(d) State the difference between Formal Information Systems and Informal Information Systems. (03 marks)
(Total 15 marks)

04. (a) Briefly explain the features of fifth (5th) generation computers. (02 marks)
(b) A mouse is a commonly used pointing device when using desktop computers. Explain the difference between an old mechanical type mouse and an optical mouse. (04 marks)
(c) “With the introduction of Camera Phones, there is no need for Document Scanners”. Can you agree with this statement? Justify your answer. (03 marks)
(d) Cathode Ray Tube (CRT) monitors are a less popular choice recently when purchasing new desktop computers. Briefly explain reasons supporting this statement. (02 marks)
(e) Special Sensors can be used to measure environmental data and input to a computer system directly. List four (04) types of such sensors. (04 marks)
(Total 15 marks)
05. (a) Briefly explain the term “Machine Language”. (02 marks)

(b) Although storage capacities are increasing with time, File Compression Software such as WinRAR, WinZIP are still in use. Briefly explain one reason to use such software. (03 marks).

(c) List five(05) components of an Operating System. (05 marks)

(d) You have just purchased a new, unbranded personal computer. Since the computer does not have an Operating System, a friend of yours gives you a DVD which contains the Windows 7 Operating System. He has copied to the DVD from his office, where they have purchased a legal windows 7 operating system for Rs.35,000/-. Explain any risks of installing this Operating System in your computer and suggest a risk free alternative Operating System. (05 marks) (Total 15 marks)

06. (a) “Telecommuting” is increasingly used by employees today. Explain the term Telecommuting. (04 marks)

(b) State three(03) factors which should be considered before selecting a software system. (03 marks)

(c) In Information Systems Development, the prototyping method is often considered as a quick way of developing a working system. Briefly explain the steps involved in this method using a diagram. (06 marks)

(d) List two(02) disadvantages of the prototyping method. (02 marks) (Total 15 marks)

07. (a) Computer Systems must be ready to withstand non-natural disasters. List three(03) non-natural disasters that can affect the smooth operation of Computer Systems. (03 marks)

(b) Input Controls are one form of application controls used in Information Systems. List five(05) input controls which can be implemented in Information Systems. (05 marks)

(c) “A Virtual Private Network (VPN) can only be implemented in a Local Area Network”. Can you agree with this statement? Justify your answer. (03 marks)

(d) “Twitter” is a popular “microblogging” site used by millions of users on the internet. Explain what is meant by microblogging. (04 marks) (Total 15 marks)