(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) When considering a retail payment system in a supermarket, which one of the following could be considered as a Sub System?
   (1) Loan Information. (2) Inventory Information.
   (3) Shareholder Information. (4) None of the above.

(B) A certain management level consists of positions such as Board of Directors, Chief Executive Officer and Managing Director. They manage the goals and policies for an enterprise. The most suitable term for this level is:
   (1) Operational Management Level. (2) Middle level of Management.
   (3) Tactical Management Level. (4) Strategic Management Level.

(C) Which one of the following is not a source for problems faced by Businesses?
   (1) Technology. (2) Market.
   (3) People. (4) Value Added Tax Calculation.
(D) Which one of the following is an example of a report generated by a Management Information System of a Soft Drink Beverage Manufacturer?

(1) The amount of water used for one type of a Beverage.
(2) The Repair cost for a Vehicle belonging to the company which was repaired last week.
(3) Weekly sales report on number of bottles sold.
(4) The number of employees who attended the year end party of the Company.

(E) A main feature introduced in the third generation of Computing Devices is:

(1) Vacuum Tubes.      (2) Transistors.
(3) Integrated Circuits. (4) Microprocessors.

(F) The smallest unit used for measuring Data stored in a computer is referred to as a “BIT”. The meaning of this abbreviation is:

(1) Beamed Integer Transmission. (2) Binary Digit.
(3) Baseband Information Track. (4) Basic Identity Test.

(G) Which one of the following situations is the most suitable for applying Radio Frequency Identification Device (RFID)?

(1) Using supply chain management to improve the efficiency of inventory management.
(2) Tracking a vehicle from a remote location, 100 km away.
(3) Ordering a pizza via the internet.
(4) Reading an e-Book using a Tablet PC.

(H) When a USB flash drive (pen drive) is “formatted” using the Operating System, which one of the following outcomes is true?

(1) It makes the drive read only.
(2) It erases all files from the drive.
(3) It re-arranges the files in the disk so that they are read faster.
(4) It takes a backup of the disk and stores in another disk.

(I) Macintosh OS is an Operating System used in:

(1) Tablet PCs.     (2) Mobile Phones.
(J) Mnemonic Codes are found in:

1. Assembly Languages.
3. Fourth Generation Programming Languages.
4. Third Generation Programming Languages.

(K) A student is typing the words Carbon Dioxide and Oxygen and their Scientific Notations as shown in the figure. The word processor feature used to type the Number “2” soon after the letter “O” is known using which one of the following terms?

1. Function.
2. Subscript.
4. Underline

(L) Which one of the following is not a Core module of an Accounting Package?

1. Accounts Receivable.
2. Accounts Payable
4. Payroll.

(M) In database terminology, DBMS refers to, which one of the following?

1. Data By Multiple Sources
2. Database Management System
3. Data Build, Managed and Sold
4. Data Between Mainframe Systems

(N) Which one of the following statements explains the term “Extranet”?

1. It is an Intranet which is partially accessible to authorised outsiders.
2. It is a Network which has extra servers for backup purposes.
3. It is a Backup Network used in corporate environments.
4. It is a Network used by criminals for money laundering activities.

(O) “Microsoft Office Outlook” is an example for which one of the following?

1. Word Processing Software.
2. Personal Information Manager Software.
3. Spreadsheet Software.
4. Accounting Software.
(P) Which one of the following could be considered as an Information System Control pertaining to Computer Hardware?

(1) Using a virus guard to scan all files entered into the system.
(2) Information Systems department is physically secured to be accessed only by authorised individuals.
(3) Using pass phrases instead of passwords to secure systems.
(4) Use of Batch Totals.

(Q) In procuring Software Services, an organisation might consider outsourcing as one alternative. The term “Outsourcing” refers to:

(1) Using an external company to provide services that might otherwise be performed by in-house employees.
(2) Purchasing Software off the Shelf.
(3) Developing software within the company to suit its exact needs.
(4) Using Open Source Software and modifying to suit the company’s needs.

(R) The Common ATM Switch network connecting over 1,700 network ATMs in Sri Lanka is known as:

(1) LankaPay.  
(2) Paypal.
(3) E-Sri Lanka.  
(4) SWIFT.

(S) Recent media reports have published that the latest version of Windows is due to be released by late 2015. This version is referred to as:

(1) Windows 9.  
(2) Windows 10.
(3) Windows 2015.  
(4) Windows 1.

(T) When purchasing an internet enabled Mobile Phone, which one of the following technologies provides the highest speed?

(1) 3G.  
(2) WiMax.
(3) ADSL.  
(4) 4G-LTE.

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

02. (a) State the difference between data and information. (02 marks)

(b) (i) Define the term “Information System”. (02 marks)
(ii) List four (04) functions of an Information System. (04 marks)

(c) The problem solving process in an Organisation relies on Information. List four (04) characteristics of Information suitable for decision making. (04 marks)

(d) “When considering the process of approving a loan of an applicant, a bank can collect all information necessary to approve the loan from Internal Information Sources only”.
Can you agree with this statement? Justify your answer. (03 marks)
(Total 15 marks)

03. (a) Briefly explain the functions performed by a Manufacturing and Production System (MPS). (03 marks)

(b) Today many organizations use an Enterprise Resource Planning (ERP) System than a Functional Information System. Explain the purpose served by an Enterprise Resource Planning (ERP) System. Your explanation must be supported by diagrams for functional system and ERP System. (09 marks)

(c) “A Management Information System is a data source for other information systems in an Organisation such as Transaction Processing Systems (TPS)”. Can you agree with this statement? Justify your answer. (03 marks)
(Total 15 marks)

04. (a) When purchasing a desktop PC today, number of factors may need to be considered. The number of Cores is one such factor. Briefly explain what is meant by a “Core” with respect to a Desktop PC, and list two (02) typical values for Cores in desktop PCs. (04 marks)

(b) In automating data entry, OCR and OMR are two techniques that can be applied. State the meaning of each abbreviation and briefly explain the difference between these two techniques. (04 marks)

(c) Compare and contrast Tablet PCs and Laptop PCs. (04 marks)

(d) List three (03) Accounting Software Packages suitable for small businesses. (03 marks)
(Total 15 marks)
05. (a) List five(05) factors which can contribute towards the cancellation of an Information System Development project. (05 marks)

(b) An Important component of the System Development Life Cycle (SDLC) is system testing. Briefly explain five(05) attributes to be tested in a developed system. (10 marks)

(Total 15 marks)

06. (a) State four(04) advantages of using E-mail. (04 marks)

(b) The amount of money circulating in Electronic Commerce transactions has grown during the recent past. There are number of models used to categorise e-commerce. Briefly explain each of the following categories:
   (i) B2C
   (ii) B2B
   (iii) C2C.
   (iv) G2C (08 marks)

(c) "Successful adoption of M-Commerce requires the use of Desktop Computers" Can you agree with this statement? Justify your answer. (03 marks)

(Total 15 marks)

07. (a) Briefly explain the difference between Freeware and Shareware. (03 marks)

(b) List four(04) output controls which can be implemented in information systems. (04 marks)

(c) Recent media reports have highlighted that many robberies have taken place at business establishments. List two(02) types of hardware that could be helpful to track down the thieves involved. (02 marks)

(d) Natural Disasters can affect the smooth operation of IT Infrastructure. By considering a private bank in Sri Lanka, briefly explain three(03) tasks that can be performed to ensure quick recovery from Flooding or Tsunami. (06 marks)

(Total 15 marks)