Answer Paper - Paper II

01. (3)   02. (4)   03. (3)   04. (1)   05. (4)   06. (2)   07. (4)   08. (4)   09. (3)   10. (3)
11. (3)   12. (2)   13. (4)   14. (2)   15. (2)   16. (3)   17. (3)   18. (2)   19. (2)   20. (2)
21. (2)   22. (4)   23. (2)   24. (1)   25. (2)   26. (2)   27. (1)   28. (1)   29. (3)   30. (3)
31. (2)   32. (1)   33. (1)   34. (1)   35. (1)   36. (3)   37. (3)   38. (2)   39. (3)   40. (4)

Paper II

01. (1)   Digital computer   Analog computer   Hybrid computer

(2)   Table   Queries   Forms   Report

(3)   A type of computer network   → WAN

  Guided media   → UTP

Half duplex data transmission   → Walki Talki

Computer cording system   → BCD

Connect the mouse and key board → PS_2

(4) $(\overline{A} . B) + (A . \overline{B})$

(5) $7F_{16}$

$1 | 111 | 111_2$ $= 177_8$

  1   7   7

(6)   Joseph Jacquard - A   Dos - B

(7)   Algorithm is steps which are used to problem solving in computer.

Or   The steps by step method of solving a problem is known as an Algorithm.

Or   Algorithm is an approach of describing the solution to give a problem.

                    Textual method   - Pseudo code

                    Graphical method - flow charts

(8)   Sub system   -   Account section   Cheque section Loan section

Components -   Accounts   stationers   computers

                    workers   managers   customers

(9)   ★   Can connect many computer devices

  ★   Hot pluggable

  ★   Plug and play

  ★   less electricity power

(10) Intranet is a computer network which is arranged by a particular institute using the techniques of internet. That can be used only by the internal people of the institute.

02. (1)   ★   get the knowledge searching in the internet.   ★   use the education software (CD / DVD)

  ★   web based learning   ★ distance Learning

  ★   online learning   ★ multimedia technology

(2)   ★   A communication software

  ★   A Telephone connection

  ★   A MODEM

  ★   ISP

  ★   WIFI Adapter

(3)   Use E-mail facilities

Social network - Face Book skype

Vedio call

Chat

(4)   Advertise via the website   security system - CCTV camera

Store the business transactions   Accounting packages
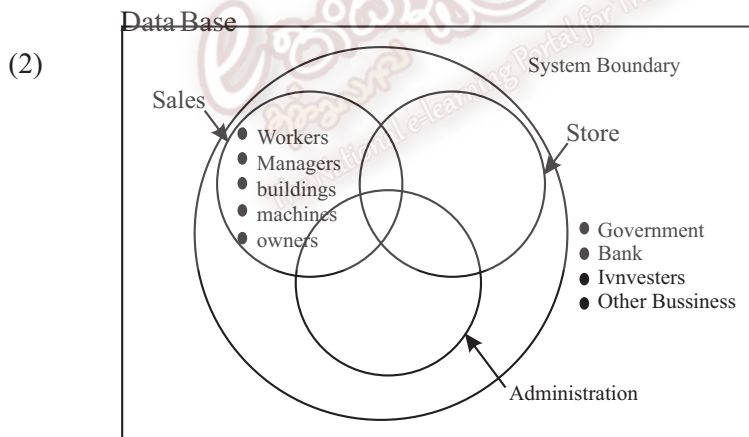
E commerce and online trading

03. (1)
(2)

$(A.\overline{B}).\overline{B}$	$\overline{A}+B$	$\overline{A}$	$\overline{B}$	$A.\overline{B}$	$\overline{A}+B$	$(A.\overline{B}).A+B$
0	0	1	1	0	0	0
0	1	1	0	0	1	0
1	0	0	1	1	0	0
1	1	0	0	0	0	0

(3)   i) 100111_2
           $- 11111_2$
           $\overline{\quad 1000_2 \quad}$

ii) 100101_2
      $- 1001_2$
      $\overline{\quad 11100_2 \quad}$

(4) $3D_{16} = 61$

3 D
$\quad \rightarrow 16^0 \rightarrow 1 \times 13 = 13$
$\quad \rightarrow 16^1 \rightarrow 16 \times 3 = 48$
$\overline{\qquad\qquad\qquad 61}$

04. (1)   a.   ★ Take a more space to store information   ★ Difficult tasks are searching details and updating information. ★ Not a security   ★ Not reliable   ★ manual system can be chang to person to person.   ★ get more time for getting information

b.   Hardware   procedure

Software   date and information

Data Base

(2)

(3)   ★ Data Base management software   ★ Spread Sheet

★ Word Processing   ★ Internet

(4)   a.   ★ Employee Numbers   ★ Employee's name   ★ Age of Employee   ★ Post
           ★ salary   ★ Telephone numbers   ★ Address

b.   ★ employee numbers   ★ National identity card number

05. (1) $= C \$ 2 \$ * B2$

(2)   Select E2 - get fill handle then drag to EG

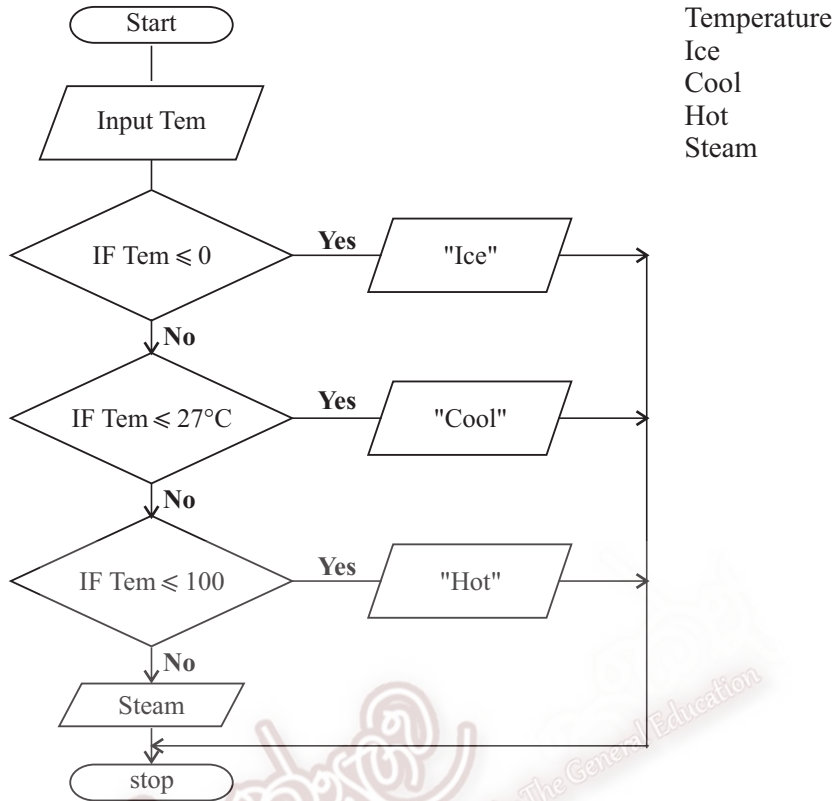or   Select E2   Edit → Copy

Select E3:EG   Edit → Paste

(3)   = D2 + E2

(4)   Select F2 - get fill handle tool and drag to F6 cell

      Or   Select F2 → Copy → F3 : F6 → Edit → Past

(05)   = Sum(F2 : F6)

06. (01)

Temperature
Ice
Cool
Hot
Steam

(02) Pseudo code

```
        Start
        Input Tem
            If Tem ≤ 0°C
                    Display "Ice"
            Else If
                Tem ≤ 27°C
                    Display "Cool"
            else If
                Tem ≤ 100°C
                    Display "Hot"
            else
                    Display "Steam"
            End If
            End If
            End If
    Stop
```

07. (a) System Development life cycle

The system development life cycle (SDLC) is a methodology that describes the stages involved in developing or altering an information system.

These stages are

1. problem definition
2. Feasibility study
3. System analysis
4. System Design
5. System Development
6. Testing
7. System Implementation
8. System maintenance

(b) E- government concept

A country or government build a inter relationship with other countries, other persons with information communication technology

eg:- www.gov.lk

G 2 G   Government to government

G 2 C   Government to citizen

G 2 B   Government to business

G 2 E   Government to employee

(c) Disadvantages of computer games.

★ Time waste   ★ Decease the thinking and creative skills of children.   ★ Addiction to games is not good for health   ★ Some games help to get fear   ★ missed their education propose.

(d) Date Transmission media

There are three parts of data transmission, process, sender, media and receiver.

Media is mainly classify as two ways there are guided media and unguided media.

Guided media is physical media (cables)

Eg :- Twisted pair cable, coaxial cable, fiber optic cable.

Unguided media is not physical media we called as ray media.

Eg:- Radio waves, microwaves, Satellite communication and enforced.

(e) Advantages of computer networking

The computer system which connects tow or more computers is called a computer network. There are many advantages of computer networks.

★ Speed   ★ Cost   ★ security

★ Ease in centralized software management   ★ sharing of resources

★ E-mail facilities

(f) Computer memory

```
                    Computer memory
                          |
         ┌────────────────┴────────────────┐
   volatile memory                   Non volatile memory
      (RAM)                               (ROM)


                    Computer memory
                          |
         ┌────────────────┴────────────────┐
   Primary memory                    Secondary memory
   (main memory)
         |
   ┌─────┼─────┐
  RAM   ROM   Cache
```