ICT Scheme

Part I

1	3	11	1	21	3	31	1
2	3	12	2	22	1	32	1
3	1	13	4	23	2	33	2
4	1	14	2	24	3	34	4
5	4	15	3	25	1	35	2
6	2	16	3	26	3	36	2
7	1	17	3	27	4	37	4
8	4	18	4	28	3	38	4
9	2	19	2	29	1	39	3
10	3	20	3	30	2	40	1

(1 * 40= 40Marks)

Part II

1.

I. 11100111_2 Step = 1Marks   and   Final Answer = 1marks

II.

A	B	C	A OR C AND NOT B
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	0
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	0

III.   INPUT   = pin code, money details
PROCESS   = Check pin code, check Account Balance, Update details
OUTPUT   = Money

IV.   Nenasala.lk
www.e-thaksalawa.moe.gov.lk
www.edulanka.lk
www.vidumanpetha.com

V.   C, D, A, B
VI.   A= Real Time

B= Multi User
C= Multi Tasking
D= Single User

VII. Key board = Ps/2
Network Cable = RJ45
Monitor = VGA
Digital Television = HDMI

VIII. F= 1000110
IX. BCD, EBCDIC, ASCII, Unicode
X.

Switch	Hub
Transmission Speed High	Transmission Speed low
Full Duplex Mode Transmission	Half Duplex Mode Transmission
sends data to the relevant computer only	sends the transmitted data to all computers

(2 * 10 = 20Marks)

2. I

Input Device	Output Device
Joystick	Plotter
Light Pen	Multimedia
Barcode Reader	Printer

(2marks)

II Magnetic Device = Hard disk, Floppy Disk, Magnetic Tape
Optical Device = CD, DVD, Bluray
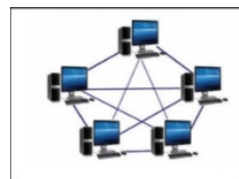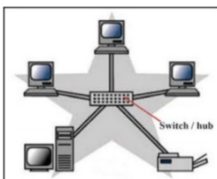Solite State Device = USB Flash Drive. Memory Card

(3marks)

III

Impact Printer	Non Impact Printer
function it is noisy	it is not noisy
not expensive	more expensive

(2marks)

IV

Star = built by centralizing a switch/hub and computers

Hub = All the computers in the network are connected with each other.   **(3mark)**

3. **I. Input, Process, Output** **(2marks)**

II. Relevancy, Completeness, Accuracy, Timeliness **(2marks)**

III. When a government communicates with its citizens, companies, Government and Non-Government Organizations and with other Governments (of different countries) using ICT, it is called e-Government.

G2C, G2G, G2B, G2E **(2marks)**

IV. The ability to add quality learning materials

Supervision of activities and publishing of results

The ability to maintain updated information

Submitting questions, getting replies and providing comments through Forums

(2marks)

V. The use of Information Communication Technology to examine and or provide healthcare to a patient who is far away from the hospital is called Telemedicine.

(2marks)

4. **I. 1. 42**   **2. 260**   **3. 3073**   **(1.5 * 3= 4.5 Marks)**

II. Decimal, Octal, Hexa Decimal **(1marks)**

III. 1. 110111_2   **2. 111111_2**   **3. 11101111_2**   **(1.5 * 3= 4.5 Marks)**

5. **I.**

A	B	(A.B)+ B
0	0	0
0	1	1
1	0	0
1	1	1

(2marks)
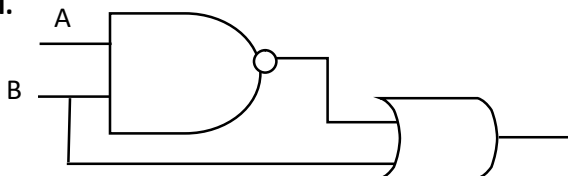
A	B	C	(A+B).(A.C)
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

(2marks)

II. 1. (A.B) + B   **2. A+$(\overline{B.C})$**

III.

6. The Operating System provides for the user to utilize the functions of a computer by managing the hardware and software in it.
    Example..   Windows 7, Windows 8,Windows 10, Mac o/s, Ubunthu

    (3Marks)

    II. System Software :- Operating System, Utilities Software, Translation Software
        Application Software:- Word Processing, Spread Sheet, Web browser

    (3Marks)

    III. Command line Interface (CLI)
        Graphic User Interface (GUI)

    (2Marks)

    IV. When we need to save different items in different places.
    When we need to have more than one Operating System in the same machine.
    To meet the requirement of the Operating System

    (2Marks)

7. I.   2
    II.   3
    III. 1
    IV.   4
    V.   19/18
    VI.   20
    VII. 8
    VIII. 13
    IX.   5
    X.   17

    (1*10= 10marks)