බස්නාහිර පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව
மேல் மாகாணக் கல்வித் திணைக்களம்
Department of Education - Western Province

වර්ෂ අවසාන ඇගයීම
ஆண்டிறுதி மதிப்பீடு   - 2016
Year End Evaluation

පිළිතුරු පතුය
Marking Scheme

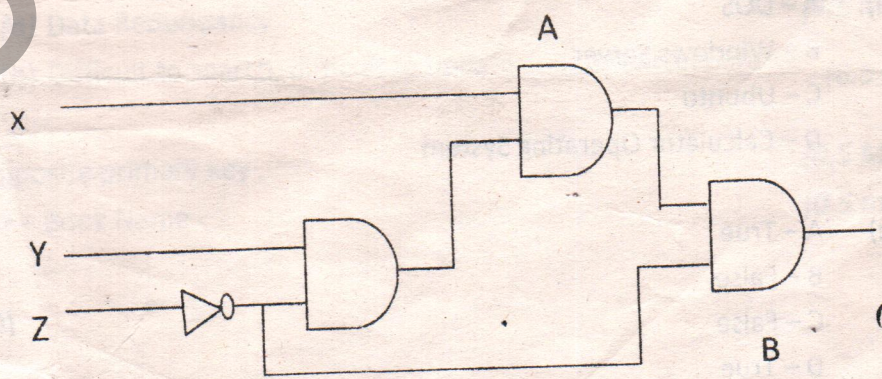| ශ්‍රේණිය தரம் Grade	11	විෂයය பாடம் Subject	Information and Communication Technology	පතුය வினாத்தாள் Paper	I , II

Paper I

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

Paper II

1.
(i)

(2 Marks)

ICT Grade 11 Answers

(ii)

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

0.5 mark each correct row

0.5   0.5   0.5   0.5

(iii) Input Device – Flat bed Scanner, Key board   *(0.5 x 2 +0.5 x2 = 2* Marks)

Output Device – Multimedia Projector, Laser Printer

(no marks if correct answer is not given)

(iv)

    A. Half Duplex

    B. Simplex

    C. Full Duplex   *(0.5 x 4 = 2 Marks)*

    D. Half Duplex

(v)

දශමය	ද්විමය	අෂ්ටමය	ෂඩ් දශමය
174	10101110_2	256_8	AE_{16}
157 315	100111011_2	473_8	$9D_{16}$ BDu 73B

(0.5 x 4 = 2 Marks)

(vi) $(A.B)+\bar{B}$ *(2 Marks)*

(vii) A – DOS

    B – Windows Server   *(0.5 x 4 = 2 Marks)*

    C – Ubuntu

    D – Calculator Operating System

(viii) A – True

    B – False

    C – False   *(0.5 x 4 = 2 Marks)*

    D – True

(ix)

1.	R
2	P
3	S
4	Q

(0.5 x 4 = 2 Marks)

(X)

1	Var
2	Array
3	7
4	Integer

(0.5 x 4 = 2 Marks)

2.

   i.   =$B4-$B4*B$10   2 Marks

   ii.   Click E4-----Click copy Icon------select E5 to E6------ Click paste Icon   2 Marks

   iii.   =SUM(E14:E16)   2 Marks

   iv.   =MAX(E17:G17)   2 Marks

   v.   Column chart or Bar chart   2 Marks

3.

                                                     (0.5 x 2 = 1 Marks)

   i.   **Publisher Table** - Pub_Id ,   **Book Table** – Book_Id

   ii.   **(a)** Publisher Table , Book Table , Book_Publisher Table   *(1.5 x 3 = 3 1/2 Marks)*

        (b) Book Table

B104	Lowen Thathubindak	Anuradha Ariyarathne	3500	Rs 230

Publisher table

P005	Dayawansa Jayakodi	955-555-128-2

Book_Publisher Table

P005	~~Dayawansa Jayakodi~~	~~955-555-128-2~~
	B104	2015

(1 x 3 = 3 Marks)

   iii.

        (a) Data Redundancy   *(0.5 Marks)*

        (b) Difficult to search, difficult to update .....(any correct answe   *(0.5 x 2 = 1 Marks)*

   iv.   Composite primary key ,   *(0.5 Marks)*

       Year + Book Name   *(0.5 marks)*

4.

    i. <u>physical Security</u>
        Uninterrupted Power Supply – UPS
        Hardware firewalls
        Locked doors
        CCTV
        Surge protector

(2 Marks)

        <u>Logical Security</u>
        Passwords
        Hardware firewalls
        Backups

(0.5 x 2 = 1 Marks)

    ii.
        Citing - mention the rightful owner and his information.
        Quoting - the use of inverted commas ("…") to identify a selected or borrowed section.
        Referencing - the listing of resources from which the information was collected. This is
        usually done at the end of an essay or article.

    iii.

        (a) Electronic products have become non working after reaching the end of their useful life
            are known as e waste. *(1 Mark)*

        (b) Mercury, Arsenic, Barium, Beryllium, Cadmium, Chromium, Dioxins *(2 Mark)*

        (c) Reduce usage - Reduce unnecessary purchase by maintaining the existing electronic
            devices
            Reuse - Sell or donate old but working electronic devices without discarding
            Recycle - Directing irreparable devices to an institute which recycle them *(1 Mark)*

    iv.

        (a)   Digital Bridge - Digital bridge is forming connections among people avoiding the
        digital divide. *(1 Mark)*

        (b)

- Increase the Digital Literacy among citizens
- Supply of computers or Organizing the purchase of computers at easy concessionary rates
- Equal opportunities to dispel other financial difficulties
- Participation of intermediaries such as people's associations and both public and private sector sponsorship and assistance to make digital bridge success.
- Establishing of ICT infrastructure for rural areas.
- Make facilities to increase English knowledge among people.

(2 Marks)

5.

i. Steps in SDLC   ½ mark for each   (3 Marks)

ii. State the function of prototyping in the first phase that used to gather user requirement.
Prototyping

     A model or a prototype of the proposed system to be implemented is developed and
demonstrated to the staff and the users for feedback and comments such as display of
screen shots, records, samples etc.   (1 Marks)

iii.

දිය ඇලි:-	පුනරාකරණ වැද්දි
A,C,G	B,D,E,F

½ mark for each   (4 Marks)

iv.

Developing systems to suit new user requirements

Issues that surfaced with the use of the system which were not identified during system
development.

Adopting new, technology into the new system to improve efficiency

                                         (2 Marks)

6.
(a)

1. Dynamic
2. Open source
3. www.nic.lk
4. Static
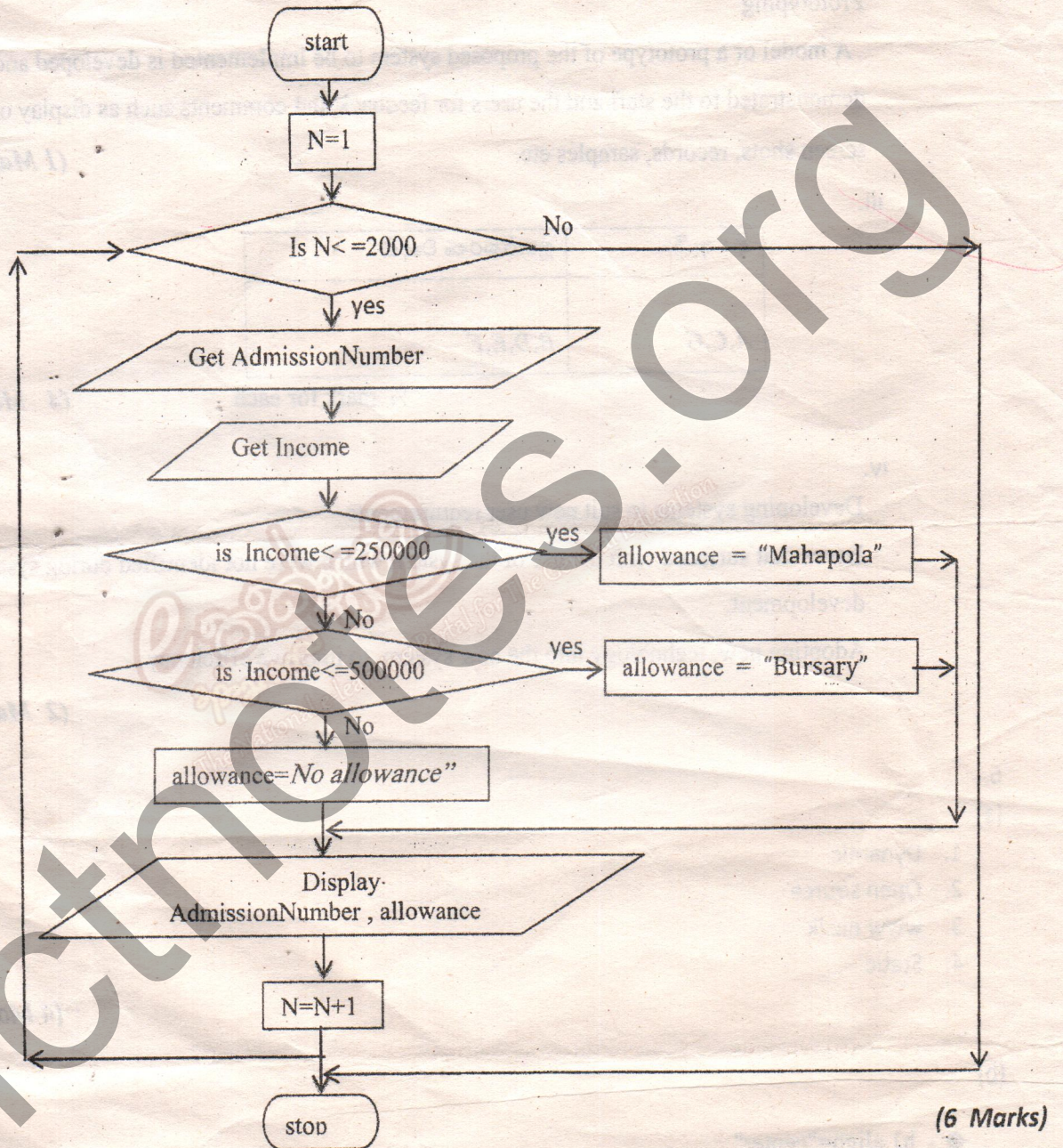
                                        (4 Marks)

(b)

❶ - h1 align="center"
❷ - br
❸ - hr color
❹ - center
❺ - p align="justify"
❻ - ul type="circle"
❼ - ul
❽ - th colspan="2"
❾ - a href
❿ - u

                                         (5Mmarks)

(c)   File ------save as ------save type ---------select encoding type as Unicode------save

7.

1(a)

```
                    ┌─────────┐
                    │  start  │
                    └─────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   N=1   │
                    └─────────┘
                         │
                         ▼
          ┌──────────────────────────┐      No
          │      Is N< =2000          │───────────────┐
          └──────────────────────────┘               │
                         │ yes                        │
                         ▼                            │
          ┌──────────────────────────┐               │
          │   Get AdmissionNumber     │               │
          └──────────────────────────┘               │
                         │                            │
                         ▼                            │
          ┌──────────────────────────┐               │
          │       Get Income          │               │
          └──────────────────────────┘               │
                         │                            │
                         ▼                    yes  ┌────────────────────────┐
          ┌──────────────────────────┐──────────▶│ allowance = "Mahapola" │
          │   is Income< =250000      │           └────────────────────────┘
          └──────────────────────────┘
                         │ No                  yes  ┌────────────────────────┐
                         ▼                ──────────▶│ allowance = "Bursary"  │
          ┌──────────────────────────┐              └────────────────────────┘
          │    is Income<=500000      │
          └──────────────────────────┘
                         │ No
                         ▼
          ┌──────────────────────────┐
          │ allowance=No allowance"   │
          └──────────────────────────┘
                         │
                         ▼
          ┌──────────────────────────┐
          │       Display·            │
          │ AdmissionNumber , allowance│
          └──────────────────────────┘
                         │
                         ▼
          ┌──────────────────────────┐
          │         N=N+1             │
          └──────────────────────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   stop  │
                    └─────────┘
```

(6 Marks)

(b)

```
program printNumbers;
   var x:integer ;
begin
  for x := 10 downto 1  do
    writeln(x);
    readln();
end.
```

❶ integer
❷ for
❸ downto
❹ writeln

(4 Marks)

6