



BCD value - 001001011000 (Marks ½) Important: If BCD value is written as 1001011000 no Marks will be allowed.

(iii) (a)  $Q = \overline{(A+B)} \cdot \overline{(A \cdot B)}$  (Marks 1)

(b) 0 (Marks 1)

(iv) ① - A | ② - C | ③ - B | ④ - D  
(Marks ½ x 4)

(v)  $A \rightarrow S$      $C \rightarrow P$   
 $B \rightarrow Q$      $D \rightarrow R$   
(Marks ½ x 4)

(vi) (a) - R    (c) - P  
(b) - T    (d) - U  
(Marks ½ x 4)

(vii) Ⓐ - Bluegriffon  
Ⓑ - Dynamic  
Ⓒ - Website Administrator  
Ⓓ - Domain name  
(Marks ½ x 4)

(viii) A - True    C - False  
B - True    D - False  
(Marks ½ x 4)

(ix) ① - Bots  
② - Fraud  
③ - Repetitive Stress Injury  
④ - Cyber crimes  
(Marks ½ x 4)

(x) Ⓐ - var  
Ⓑ - count  
Ⓒ - downto  
Ⓓ - count  
(Marks ½ x 4)

(Total Marks 20)

2.

- (i) Use of Uninterrupted Power Supply
- Use of hardware firewalls
- Controlled access through doors
- Use of CCTV

Maintain the lab with free from dirt, dust, moisture etc.

(Marks 1 x 2 = 2)

(ii)

Use of passwords.

Data Encryption

Taking backups.

Use of software firewalls

(Marks 1 x 2 = 2)

(iii)

- Machinery has taken over the industry replacing the talents of people.
- Libraries have been made to close down and jobs in the sector lost due to the electronic books and magazines.
- Online learning through the distance mode has limited teacher resources.
- Health concerns are easily sorted out from homes itself, cutting down the job opportunities in laboratory services.

(Marks 1 x 2 = 2)

(iv) CERT (Computer Emergency Response Team)

(Marks 1 )

(v) Ⓐ Improving Digital Literacy

Ⓑ Carpel Tunnel Syndrome

Ⓒ Plagiarism

Ⓓ Referencing

Ⓔ Phishing

Ⓕ Recycling (Marks $\frac{1}{2}$  x 6 = 3)

(Total Marks10)

3. Important : if table names and field names are not written as it is marks will not be allowed

(i). **patient** table - **patient\_number**

**physician** table - **physician\_no** (Marks 1 x 2 = 2)

(ii).

(a) **reservation** table (Marks 1)

(b) **physician** table (Marks 1)

(iii).

(a) **reservation** table→(P0005, D1002, 2020/02/16) (Marks 1)

(b) **patient** table→ (P0006, Neela Amarasiri, 0778529634 )

**physician** table→ (D1006,Premalal Wijesundara, gynecologist and obstetrician, ,1100)

**reservation** table→ (P0006, D1006, 2020/02/16)

(Marks 1 x 3 = 3)

(iv). physician table, reservation table

(Marks 2)

(Total Marks10)

4. (i)

① .lk

⑤ IP

② ICT/Grade10/

⑥ ICMP

③ Web browser

⑦ FTP

④ Chrome

⑧ Draft

(Marks  $\frac{1}{2}$  x 8 = 4)

(ii) (a)

① head

⑦ border

② center

⑧ tr

③ img

⑨ th

④ br

⑩ td

⑤ font

⑪ ul

⑥ p

⑫ circle

( All correct 5 marks)

(9-11 correct 4 marks)

(6-8correct 3marks)

(3-5correct 2marks)

(1-2 correct 1mark)

Note: No marks awarded if answers within the  $\diamond$

(b) In the Save As dialog box, Encoding Form must be made into a Unicode Form. (1 mark)

(Total marks10)

5.

(i). =SUM(F4:F9)

(ii).

(a) =B4-B4\*C\$14

(b) =B6-B6\*C\$14

(iii). .

(a) =C4\*D4

(b) =E4-F4

(iv). =F4+K4

=SUM(F4,K4)

(v). =MAX(N4:N9)

(Marks2 x 5 = 10)

6.

- (i) (A) → Designing the solution
- (B) → Testing and debugging
- (C) → Maintenance of the system

(Marks 0.5 X 3)

- (ii) Objectives of the new system, Benefits of the system, efficiency of the new system

(Marks 0.5 X 3)

(iii)

(P)	✓	(T)	✓
(Q)	✓	(U)	x
(R)	x	(V)	✓
(S)	x		

(Marks 0.5 X 4)

- (iv) Direct deployment/ parallel deployment/ pilot deployment/ phase deployment

*(Any two answers and short description about relevant to given answers)*

(for two methods-Marks 0.5 X 2)

(for explanationMarks 1 X 2)

(TotalMarks 3)

(v)

- In waterfall model next stage will be started after completion of the current step. But in Iterative Incremental model a system is developed through repeated cycles and in smaller portions at a time.
- In waterfall model the result of the developed system is found at the final stage. But in Iterative Incremental model as the system is developed through iterations system can be shown in parts before the final stage.
- Iterative Incremental model software developers can develop the system using what was learned at the previous stages. But in waterfall model no such advantage since next stage will be started after completion of the current step.

*(Any two answers or any appropriate answer)*

(Marks1 X 2)  
(Total Marks10)

7(i).

- A- C1=0,C2=0,C3=0,C4=0
- B- ANS1="Y"
- C- yes
- D- no
- E- ANS2="Y"
- F- no

G- yes  
H- Display C1,C2,C3,C4

(Marks 0.5 X 8)

(ii).

Begin

C1=0,C2=0,C3=0,C4=0

Repeat

Enter eligible for voting(Y/N) as ANS1

If ANS1="Y" then

Vote by the relevant candidate number as Vote

If Vote=1 then

C1=C1+1

Else

If Vote=2 then

C2=C2+1

Else

If Vote=3 then

C3=C3+1

Else

If Vote=4 then

C4=C4+1

Else

Display "your vote is invalid"

Eid if

End if

End if

End if

Enter voting is over(Y/N) as ANS2

Until ANS2="Y"

Display C1,C2,C3,C4

End.

(if all are correctMarks 3  
Incomplete Mark1 )

(iii).Var C:Array[1..4] of integer;

(Marks3)

(Total Marks10)