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

1 X 40 = 40 Marks

Paper ii

1)

i) Input - Barcode / Credit card
   Process - Calculating the total amount for each product / Calculating total bill amount/
   Output – Bill / SMS (2 Marks if all three answers are correct, 1 mark for 2 correct answers, 0.5 for 1 correct answer)

ii) Price of a pen - C_{16} - 1 *12 - රු. 12
    Price of 2 pens - රු. 12 * 2   - රු. 24   (0.5 Marks)
    Price of a book - $5B_{16}$ - 1 * 11 -11
                          16 * 5 - 80   91   - රු. 91   (0.5 Marks)
                          Total amount   - රු. 115   (1 Mark)

iii) $\left(\overline{A}.\overline{B} \right) + \overline{A}.\overline{B}$ (2 Marks)

iv) 1 – C , 2 – D , 3 – B , 4 – A (2 Marks)

v) Loss of efficiency as it takes more times for reading a file. (2 Marks)

vi) 1 – C , 2 – D , 3 – B , 4 – A (0.5 x 4 Marks)

vii) 1 – P , 2 – S , 3 – R , 4 – Q (0.5 x 4 Marks)

viii) A - True   B - False   C - False   D - True (0.5 x 4 Marks)

ix) Advantages   - Ability to connect anytime and anywhere / efficiency
    Disadvantages - Need an uninterruped internet connection / inability to conduct in slow connections/ Hardware or software failures (01 x 2 Marks)

x) P – 9   Q – i   R – count (2 Marks for if three answers are correct, 1 Mark if 2 answers are, 0.5 marks if 1 answer is correct)

_____

2) A)
 i)
    a. Facebook, Twitter, LinkedIn etc. (0.5x 2 Mark)
    b. Discussion forums / ability to share ideas with people all over the world/ to sale products at cheap prices (1 Mark)
    c. Releasing images to internet without permission/Defaming others with fake infomarion / Stealing personal informaition/ Cheating others and maintaining undesirable relationships / Harming individuality . (1 Mark for suitable 2 answers)

d. Be careful when releasing personal information to social media / Be careful when joining friends/ Avoid opening doubtful emails / Be careful when installing software distributed over social media. (2 Marks for 2 corect answers)

ii)
   a. Cancers, diseases in nervous system, Skin infections, Kidney disesses etc. (1 Mark for 2 answers)
    b. Reduce, Reuse , Recycle (1 Mark for 2 steps)

B)   A- Q- Y (1 Mark)
      B- R – Z (1 Mark)
      C- P – X (1Mark)

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3) A)
    1 – title   2 – i   3 – center   4 - align   5 – face   6 – color   7 – border
    8 – caption   9 – th 10 – colspan 11 – td   12 – rowspan (0.5 x 12 = 06 Marks)
    Note : Marks are not given when tags are enclosed with < >

B) i. suresh@gmail.com , raveen@ymail.com (1 Mark)
    ii. suresh@gmail.com , raveen@ymail.com , sarath@abc.net (1 Mark)

C) i.   A - web server
            B - multimedia server (0.5 x 2 = 01 Mark)
    ii. B   (0.5 Marks)
    iii. No   (0.5 Marks)

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4) A)
    i.   =sum(B4:B7)   (1 Mark)
    ii.   =B4 * E$10   or   =B4 * E10 (2 Marks)
    iii. Function 1 – sum,   cell 1 – E4,   cell 2 – E6 (2 Marks if all three terms are correct , 1 mark if 2 answers are correct, 0.5 if only one answer is correct)
    iv. =C9 – B10   (1Mark)

B)
    i.   1 - Normal view) 2 - Slide sorter view)
       3 - Reading view 4 - Notes Master. (0.5 x 4 = 02 Marks)
    ii. a) ✓   b) x   c) x   d) ✓   (0.5 x 4 = 02 Marks)

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5)
      a) Customers – Custmer_No , Distribution officer - Distribution_officer_No , Orders – Order_No
                         (0.5 x 02 = 01 Marks)
     b) Customers and Orders – (One – Many) (1 Marks)
     One customer places many orders but an order is made by only one customer. (2 Marks)

  ii.   a) A foreign key is a column or group of columns in a relational database table that provides a link between data in two tables. It acts as a cross-reference between tables because it references the primary key of another table, thereby establishing a link between them. (2 Marks)

b)   i) Orders , Customers (2 Marks)
     ii)

Orders					Customers		
Order_No	Order	Customer_No	Distribution_Ofiicer_NO		Customer_No	Name	Contact_No
A1009	IG Keyboard	104	Dis_10		104	F Perera	0772050657

(2Marks)

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6)

i)
   a) Difficult to search data / Difficult to take backups / Difficult to analyze data / Difficult to insert, update, delete data./ Need more space for data store   (1 Mark)
   b) User can log into system anytime, anywhere   (1Mark)
   c) Enhance efficiency / Accuracy and usability / ability to provide a quality service   (2 Marks)
   d) Unit testing / System testing / Integrated testing / Acceptance testing (1.5 Marks)
   e) No, all requirements of the new system are not clearly mentioned. (2 Marks)
ii)   1 – B   ,   2 –E   ,   3 – D   ,   4 – C ,   5 – A   (2.5 Marks)

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7)

i) 1 – Num   2 – Total   3 – Num   4 – Total   (4 Marks)

ii) selection in iteration   (2 Marks)

iii) Begin
         Total = 0
         Num = 1
           While Num <= 20
                X = Num Mod 2
                  If x = 0 then
                        Total = Total + Num
                  End if
                Num = Num + 1
           End while
         Display Total
      End   (4 Marks)