

2016/8/29 (4:30)

Information and Communication Technology(20 E)

Part I

2016

Q.No	Answer		Q.No	Answer
1	5		26	4
2	3		27	2
3	2		28	1
4	5		29	4
5	4		30	2
6	3		31	2
7	3		32	3
8	2		33	1
9	2		34	5
10	2		35	4
11	2		36	1
12	3		37	1
13	4		38	4
14	1		39	3
15	1		40	4
16	2		41	5
17	1		42	4
18	3		43	2
19	4		44	4
20	3		45	3
21	3		46	2
22	2		47	4
23	5		48	1,2
24	2		49	2
25	2		50	4

Information and Communication Technology(20 E)

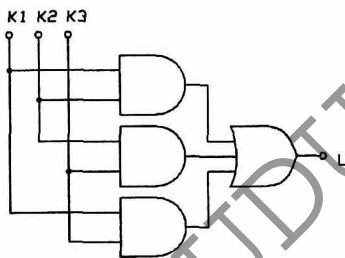
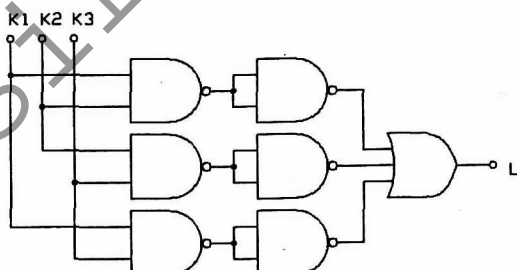
Part II A

2016

Q.No	Model Answer	Marks
1 (a)	(i) When clicked on 'Cover Page', the image named 'coverPage.jpg' is displayed on a new page/tab Or Displays a page with the content Cover Page which is a hyper link	1
	(ii) When clicked on 'Content' the document 'content.html' is displayed on the same page/tab overwriting the content on that page or Displays a page with the content Content , which is a hyper link.	1
	(iii) When clicked on the image 'figures.jpg' the document 'figures.html' is displayed on the same page/tab overwriting the content on that page or Displays an image, which is a hyper link	2
1 (b)	External style sheets	1
1 (c)	<style type="text/css">	1
	h2{	2
	color: red; text-align: center; }	
	p{	2
	font-family:"Courier New"; font-size: 14px;	
	}	
	</style>	

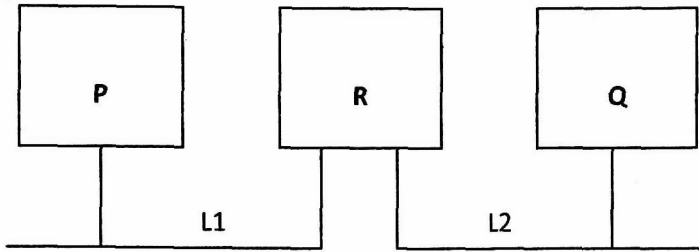
2 (a)	<p>C2C: An individual seller selling the camera online to another individual buyer</p> <p>B2C: Using the Paypal service</p>	<p>1</p> <p>1</p>
2 (b)	<p>To securely complete the online payment process and</p> <p>Ensure that the seller received the money for the item sold.</p>	<p>2</p> <p>2</p>
2 (c)	<p>It may not be possible to inspect the item on sale before agreeing to buy</p> <p>There is a doubt that the item may not arrive even though the payment is done</p>	<p>2</p> <p>2</p>

3 (a)	<p>Closed System</p> <p>(1) Inputs (Water) is available within the system</p> <p>(2) Outputs (Oxygen and Hydrogen) release to the system.</p>	<p>1</p> <p>2</p> <p>2</p>
3 (b)	<p>(1) Accuracy</p> <p>(2) Efficiency</p>	<p>2</p> <p>1</p>
3 (c)	<p>I-P-O similar</p> <p>Human brain is more intelligent than an information system Or any other acceptable reason</p>	<p>1</p> <p>1</p>
4 (a)	<p>(i)</p> <p>Nothing</p> <p>It has a never-ending(infinite) loop</p>	<p>1</p> <p>1</p>
	<p>(ii)</p> <pre> total = 0 i = 1 while (i <= 10): total = total + i i = i + 1 print(total) </pre>	<p>3</p>
4 (b)	<p>Address bus width = 16 bit</p> <p>Address size = 16 bit</p> <p>Max number of unique addresses possible = 2^{16}</p> <p>Max number of bytes addressable = 2^{16}</p> <p>Max usable size of memory = $2^{16} = 2^6 \times 2^{10}$</p> <p>= 64 KB</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>

Q.No	Model Answer	Marks																																				
1	<p>Truth table</p> <table><tr><th>K1</th><th>K2</th><th>K3</th><th>L</th></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td><td>1</td></tr></table> <p>Boolean expression</p> $L = K1'.K2.K3 + K1.K2'.K3 + K1.K2.K3' + K1.K2.K3$ <p>Simplified Boolean expression</p> $L = K1.K2 + K2.K3 + K3.K1$ <p>Note : Correct rules must be given for 4 marks</p> <p>Circuit using basic gates (not necessary for the answer)</p>  <p>Circuit using given gates</p> 	K1	K2	K3	L	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	0	0	1	0	1	1	1	1	0	1	1	1	1	1	<p>4</p> <p>1</p> <p>2</p> <p>5</p> <p>3</p>
K1	K2	K3	L																																			
0	0	0	0																																			
0	0	1	0																																			
0	1	0	0																																			
0	1	1	1																																			
1	0	0	0																																			
1	0	1	1																																			
1	1	0	1																																			
1	1	1	1																																			

2

a)



5

b) Q.

IP address indicates the final destination and it does not specify the intermediate routers/gateways.

5

c) R.

The frame F2 is originated at the router R and therefore the source MAC address in frame F2 is the MAC address of R.

5

3	<p>a) B2E – An online service provided by the bank to its employees</p> <p>b)</p> <ul style="list-style-type: none"> • Manage their personal activities need to be done during work hours without leaving the workplace • Get information better and faster, easily <p>c) Yes.</p> <p>It is expected to enhance their efficiency and satisfaction as it enhances the balance between the employees' work and personal life</p> <p>d)</p> <ul style="list-style-type: none"> • Content selection and suggestion • Content prioritization • Alerting 	<p>2 or 0</p> <p>2</p> <p>2</p> <p>2</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p>
---	---	--

4

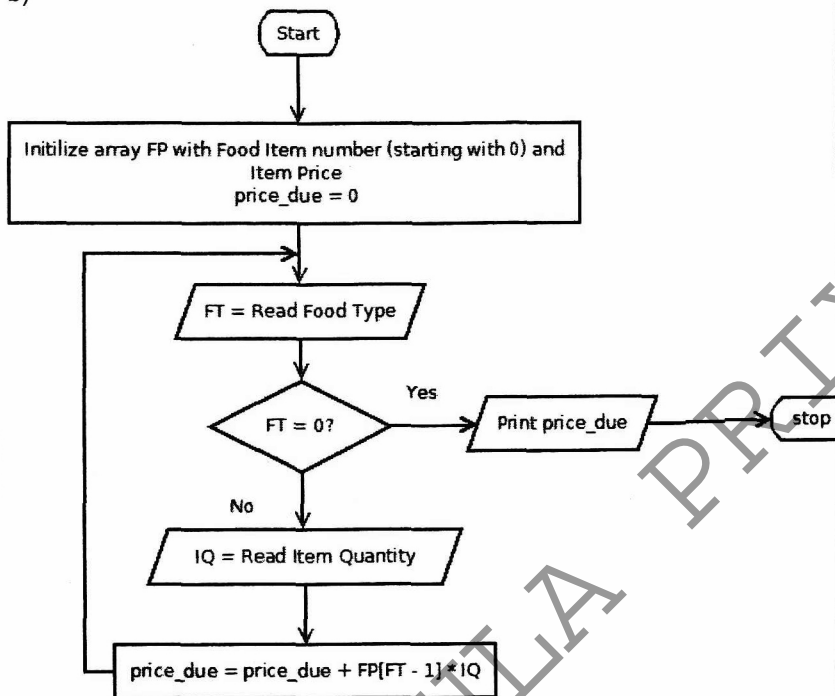
a) Inputs

- i) Input to indicate end of food items
- ii) Food Type
- iii) Number of items of the food type

Output

Payment due for the tray.

b)



Star/end : 1 Mark

Correct Initialization : 1 Mark

Correct Inputs : 1 Mark

Correct Loop : 1 Mark

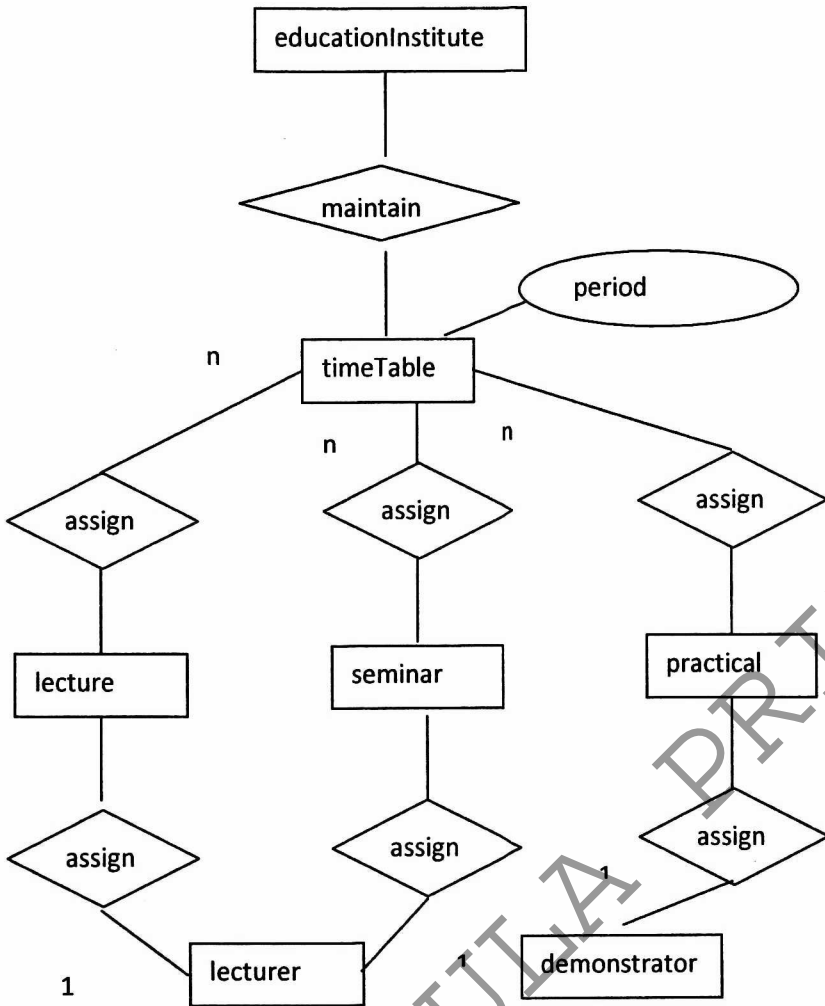
Correct Computation : 1 Marks

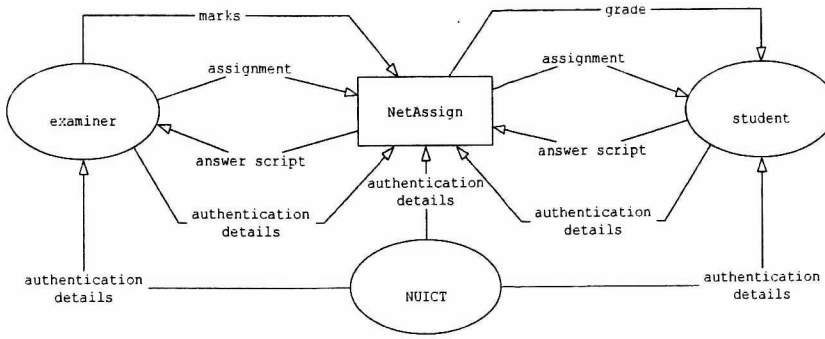
Output : 1 Mark


```
c)
price_due = 0.0
IP = [10.00,12.00,15.00,10.00,25.00,45.00,50.00,25.00,10.00,12.00]
FP = int(input("Enter food type : "))
while FT !=0:
    IQ = int(input("Enter item Quantity : "))
    price_due = price_due + FP[FT-1] * IQ
    FT = int(input("Enter food type : "))
print(price_due)
```

Note :

- 1 mark : price initialization
- 1 mark : array initialization
- 1 mark : input food type and Quantity
- 1 mark : correct loop
- 1 mark: correct computation





(1 mark for each component)