

Information and Communication Technology(20 E)

Part II A

2016

Q.No	Model Answer	Marks
1 (a)	(i) When <u>clicked on 'Cover Page'</u>, the image named <u>'coverPage.jpg'</u> is <u>displayed/opened</u> on a <u>new tab/window</u>. (ii) When <u>clicked on 'Content'</u> the document <u>'content.html'</u> is <u>displayed/open</u> on the <u>same window/tab</u> (overwriting the content). (iii) [When <u>clicked</u> on the <u>image 'figures.jpg'</u>] [the document <u>'figures.html'</u> is <u>displayed/opened</u> on the <u>same window/tab</u> (overwriting the content on that page).] Note : Do not consider the case-sensitivity of the names(Content, Cover Page, coverPage.jpg, content.html, figures.jpg, figures.html)	1 1 1 1
1 (b)	External style sheets/External/External CSS Note : Do not give any marks if more than one mechanism is given	1
1 (c)	<pre><style type= "text/css"> h2{ color: red; text-align: center; } p{ font-family:"Courier New"; font-size: 14px; }</pre> <pre>p{font : 14px "Courier New"; }</pre> <u>Note : Order is important if both values are given together</u> <pre></style></pre> Note: 1) If the type is given the correct type text/css should be given within quotes(double or single). 2) Single quote is also allowed in places where double quotes are used. 3) All CSS properties and values are case sensitive.	1 1 1 1 1

2 (a)	C2C: I sell my <u>camera online/through internet/website</u> to an <u>African buyer</u>. B2C: Paypal like service.	2
2 (b)	To secure the payers sensitive data.(security) Guarantee [for the delivery] and [the payment to the seller].	1
2 (c)	Reliability You may not get the item at all not get the item you have ordered get a poor quality item Security Any other person may rob your <u>credit card details</u>. Privacy The buyer may use your <u>credit card number</u> to steel money or expose it/personal details to others Note : Any two answers are acceptable. * Any two options	1
3 (a)	Closed System (1) Inputs (Water) is available within the system (2) Outputs (Oxygen and Hydrogen) release to the system.	2
3 (b)	(1) Accuracy/Any problem caused by accuracy (2) Efficiency/Any problem caused by efficiency	1
3 (c)	Compare : Both are I-P-O systems (Example : Both can process data) Contrast : Human brain is more intelligent than an information system Or any other acceptable reason (examples : Natural vs Artificial; accuracy; reliability; emotional.....) Note: There should be an answer for each class.	1

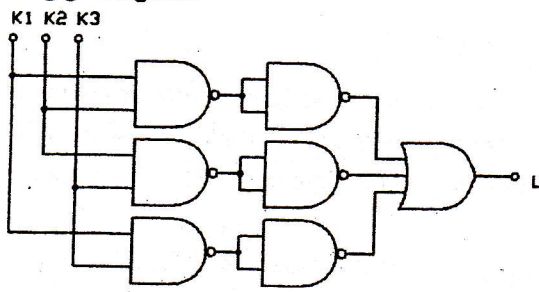
4 (a)	(i) Nothing/no output	1
	It has a never-ending(infinite) loop	1
	(ii) total = 0 i = 1 while (i <= 10): total = total + i i = i + 1 print(total) Note : The program should be executable and print 55 as the final value.	2 1
4 (b)	Address size = 16 bit Max number of unique addresses possible = 2^{16} Max number of bytes addressable = 2^{16} Max usable size of memory = $2^{16} = 2^6 \times 2^{10}$ Note : Correct answer 1 mark Correct computation 4 marks	= 64 KB

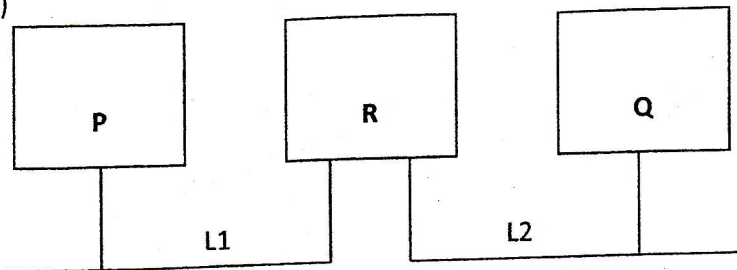
ලිපික ප්‍රමාණය = 16 bit
 විවිධ ලිපික ලේඛන = 2^{16}
 ප්‍රමාණය නිසා ලිපි ප්‍රමාණය = 2^{16}
 භාවිත කළ හැකි ප්‍රමාණය = $2^{16} = 2^6 \times 2^{10}$
 = 64 KB

Information and Communication Technology(20 E)

Part II B

2016

Q.No	Model Answer	Mark																																				
1	Truth table <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> Note: <i>entire table correct</i> (1) In the truth table the symbols K1,K2,K3,L should be used or should be defined. Boolean expression $L = K1'.K2.K3 + K1.K2'.K3 + K1.K2.K3' + K1.K2.K3$ Simplified Boolean expression $L = K1.K2 + K2.K3 + K3.K1$ Note : Correct rules 2 marks Correct computation 2 marks Correct answer 1 mark Circuit using given gates  Note : <u>Connections should be marked by dots or jumpers</u> <i>Handwritten notes:</i> $K1K2K3 + K1K2K3 + K1K2K3 + K1K2K3$ $K2K3(K1 + K1) + K1K2K3 + K1K2K3$ $K2K3 + K1K2K3 + K1K2K3$ $K3(K2 + K1K2) + K1K2K3$ $K3(K2 + K1) + K1K2K3$ $K3K2 + K3K1 + K1K2K3$	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	4 1 2 5 <
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)  Note : Router is in both LANs and L1 and L2 are separate LANs – 3 Marks P and Q are in different LANs L1 and L2 – 2 Marks. This must be marked only when the first part is correct. b) Q. IP address indicates the final destination and it does not specify the intermediate routers/gateways. 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	a) B2E An online service provided by the bank to its employees Note : Final mark should be 0,1 or 3 b) - Manage their personal activities need to be done during work hours <u>without leaving the workplace</u> - Get <u>information better and faster, easily</u> c) Yes/No. Note : If the answer is No justification must be given. It is expected to enhance <u>their efficiency</u> and <u>satisfaction</u> as it enhances the balance between the employees' work and personal life. Note : Justification should support Yes/No claim d) - Content selection and suggestion - Content prioritization - Alerting	1 2 2 2 1 4 1 1 1

4

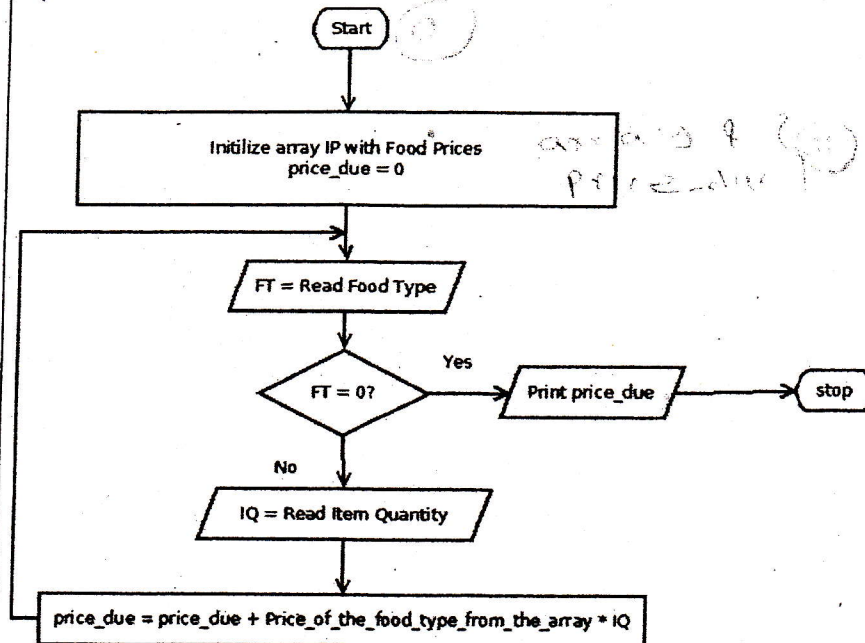
a) Inputs

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

Output

Payment due for the tray.

b)



Start/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]

FT = int(input("Enter food type : "))

while FT !=0:

IQ = int(input("Enter item Quantity : "))

price_due = price_due + IP[FT-1] * IQ

FT = int(input("Enter food type : "))

print(price_due)

Note :

1 mark : price due initialization

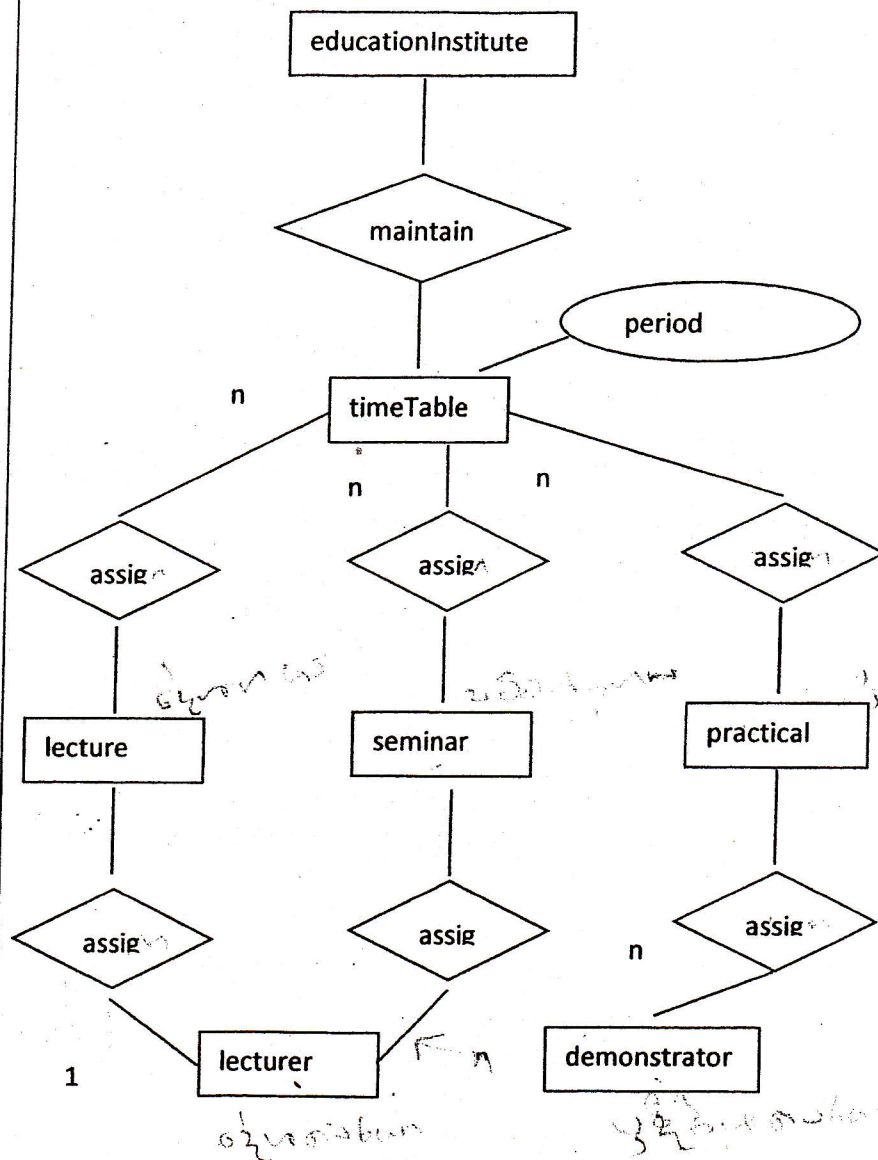
1 mark : array initialization

1 mark : input food type and Quantity

1 mark : correct loop

1 mark: correct computation

5



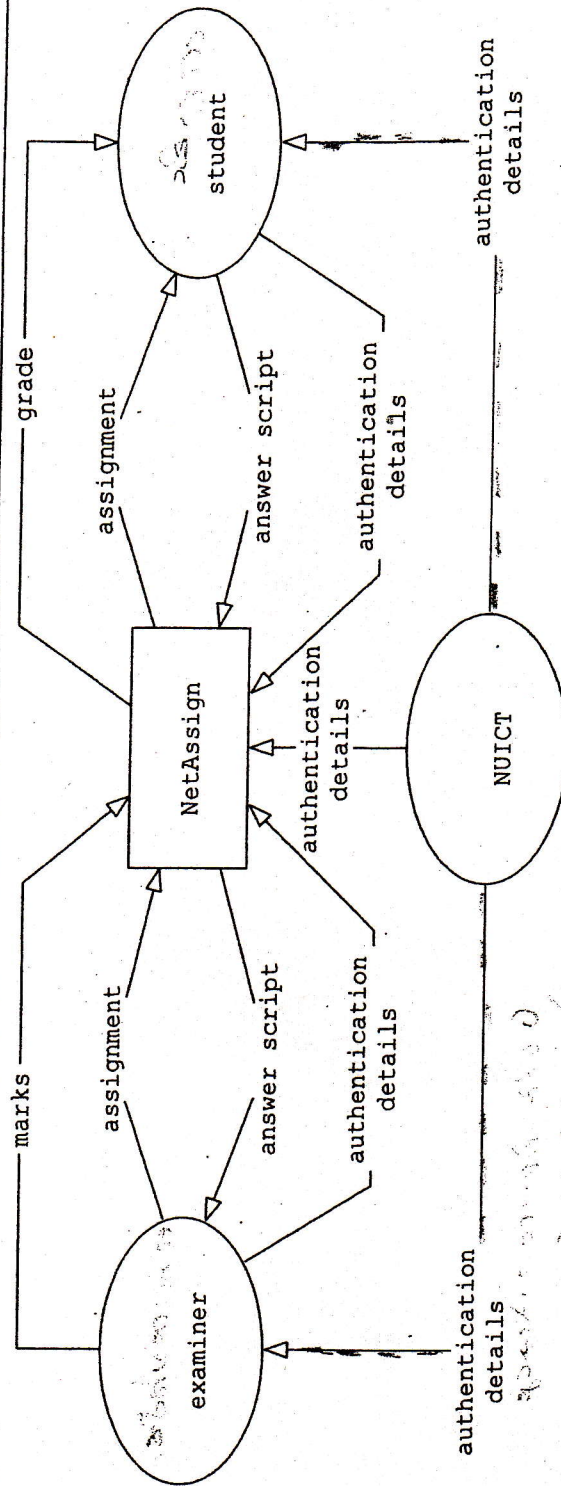
Note :

Each entity 1 marks (7 total)

Each relationship with cardinality (if information is available) (7 total)

The attribute of Timetable 1 mark

6



(1 mark for each component)