SIIT ITS 413

ITS 413 – Quiz 7					
First r	name: Last name:				
ID:	Total Marks: out of 10				
Quest	ion 1 [3 marks]				
a)	IPsec in tunnelling mode can be used to create a Virtual Private Network from your Home PC to a company network. Draw a diagram that shows the Home PC, Company Router and Company PC, and indicate on the diagram:				
	a. Tunnel end-points				
	b. The traffic that is encrypted				
b)	Explain the advantage of using IPsec in tunnelling mode for a VPN, as opposed to using IPsec end-to-end (transport mode).				
Quest	ion 2 [3 marks]				
	n advantage and disadvantage of using symmetric servers (as compared to asymmetric s) in an instant messaging architecture.				
Advan	atage:				
Disad	vantage:				

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Question 3 [4 marks]

a) Is normal IP routing connectionless or connection-oriente	a)	Is normal IP	routing	connectionless	or connection-oriented
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- b) Is TOR connectionless or connection-oriented?
- c) In TOR the original source Proxy encrypts a packet (onion) with different keys before sending. If there are three TOR routers used between the source Proxy and destination Proxy, illustrate the order in which the original data is encrypted. Assume the routers are R1, R2 and R3, where R1 is the first router and so on.

d) List the TOR nodes from part (c), and identify the keys that each node owns (or knows).

e) Explain what type of anonymity TOR provides, and using the above example, how it provides the anonymity.

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