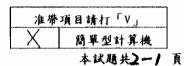
淡江大學 95 學年度轉學生招生考試試題

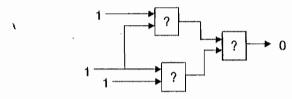
系別:資訊工程學系三年級

科目:資訊概論

44-1



1. In each circuit below, the rectangles represent the same type of gate. Based on the input and output information given, identify whether the gate involved is an AND, OR, or XOR. Please briefly describe the answer. (10%)



- 2. What would be the result of performing a one-bit right circular shift on the following bytes represented in hexadecimal notation (give your answers in hexadecimal notation)? (10%)
 - (a) 3F

(b) 77

(c) 0D

- (d) FF
- 3. Using the commands SELECT, PROJECT, and JOIN, write a sequence of instruction to answer the following questions about parts and their manufacturers in terms of the following database: (20%)

PART relation

PartName	Weight
Bolt 2X	1
Bolt 2Z	1.5
Nut V5	0.5

MANUFACTURER relation

CompanyName	PartName	Cost
Company X	Bolt 2Z	0.03
Company X	Nut V5	0.01
Company Y	Bolt 2X	0.02
Company Y	Bolt 2Z	0.04
Company Z	Nut V5	0.01

- (a) Obtain a list of the parts made by Company X along with each part's cost.
- (b) Which companies make a part with weight 1?
- Multiple-choice questions (10%)

(1)	In a	 data compression method,	the received	data are an exact	copy of the o	original message	
			4				

(a) lossless

(b) lossy

(c) lessloss

- (d) glossy.
- layer of the OSI model transmits a bit stream over a physical medium. (2) The ___
 - (a) physical

(b) data-link

(c) network

- (d) transport
- (3) A gateway operates at _____ of the OSI model.

(a) the first layer

(b) the first two layers

淡江大學 95 學年度轉學生招生考試試題

44-2

系別:資訊工程學系三年級

科目:資訊概論

准帶項目請打「V」

X 簡單型計算機

本試題共**之一**入頁

•			
(c) the three layers	(d) all layers		
(4) A bridge operates at of t	the OSI model.		
(a) the first layer	(b) the first two layers		
(c) the three layers	(d) all layers		
(5) The transport layer protocol of TCP/IP is called			
. (a) TCP	(b) UDP		
(c) IP	(d) a and b.		

5. Use the following table of processes and service time. Draw a Gantt chart that shows the completion times for each process using round robin CPU scheduling with a time slice of 60. (10%)



- 6. Consider the following page map table. Assume that the frame size is 1024 bytes. Please answer the following questions (20%)
 - (a) What is the physical address associated with the logical address <2, 85>?
 - (b) What is the physical address associated with the logical address <3, 1025>?



7. Give the adjacency matrix representation of the following graph. Give the depth-first traversal of the given graph starting from vertex A. (20%)

