## 第一題 a

問 packet-switching 和 circuit-switching 的區別

第一題 b

問 transport layer 的四個特色

分別是

flow control

congestion control

reliable data transfer

multiplexing & demultiplexing

## 第二題 a

問 slotted aloha & pure aloha 的區別

第二題 b

問 binary exponential backoff 是怎麼運作

## 第三題

課本的圖片,下一頁有拍到一點點,也有題目

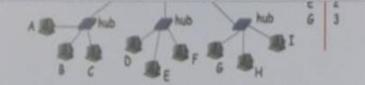


Figure 1 is a switch table with interfaces 1, 2, and 3.

- (a) (10%) Assuming C sends a frame to E, as shown in Figure 1 please explain the actions taken the Ether-switch, referencing the switch table provided in Figure 1, from the moment the switch receives the frame from C and update the switch table
- (b) (10%) Describe the actions performed by the hub connected to E in Figure 1 when it receives a data frame from interface 2 of the switch.
- 4 (20%) Wi-Fi and Mesh Networks
- (a) (10%) please draw the enhanced mode of the protocol CSMA / CA (with reservation) in Wi-Fi
- (b) (10%) Describe any advantage of the Mesh networks in comparison with Wi-Fi 802.11
- 5 (20i%) (a) (10%) What is major difference to use Connection-oriented (TCP) and Connectionless (UDP) in socket programming
- (b) (10%) Please describe the client-server model