Est. Length: 2:00:00 Time Taken:0:22:36 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

Page 1:

1 2 3 4 5 6 7 8 9 10

Question 1 (14 points) *Saved*

Arrange the following events for an STA to successfully transmit in the distributed coordination function without RTS/CTS.

6	STA completes its data transmission.
1	STA senses that the wireless medium is free.
5	When the backoff interval counter reaches zero, STA will start its data transmission.
8	AP will transmit the acknowledgement packet.
2	STA will wait for the expiry of distributed interframe space (DIFS).
3	STA will start to decrease its backoff interval counter.
4	STA will listen to the wireless medium to detect for any transmission.
9	STA will select a random backoff interval.
7	AP will wait for the expiry of short interframe space (SIFS).

Est. Length: 2:00:00 Time Taken:0:22:45 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

Page 1:

1 2 3 4 5 6 7 8 9 10

Question 2 (8 points) *Saved*

Which one of the following services is used to route a packet from a wired LAN to an STA in a BSS?

- ○ Association
- ○ Distribution
- ● Integration
- ○ Reassociation

Question 3 (8 points) *Saved*

Which one of the following services is used to allow an STA to roam around different ESS?

- ● Reassociation

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Question 3 (8 points) *Saved*

Which one of the following services is used to allow an STA to roam around different ESS?

- ● Reassociation
- ○ Disassociation
- ○ Association
- ○ Integration

Question 4 (14 points) *Saved*

Arrange the following events for an STA to successfully transmit in the distributed coordination function RTS/CTS.

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Question 4 (14 points) *Saved*

Arrange the following events for an STA to successfully transmit in the distributed coordination function RTS/CTS.

10	STA completes its data transmission.
7	AP will transmit CTS.
13	STA will select a random backoff interval.
8	After CTS is successfully transmitted, STA will wait for the expirty of short interframe space (SIFS).
1	STA senses that the wireless medium is free.
6	After RTS is successfully transmitted, AP will wait for the expiry of short interframe space (SIFS).
11	AP will wait for the expiry of short interframe space (SIFS).
2	STA will wait for the expiry of distributed interframe space (DIFS).

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Est. Length: 2:00:00 Time Taken:0:23:13 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

Page 1:

1 2 3 4 5 6 7 8 9 10

8	After CTS is successfully transmitted, STA will wait for the expirty of short interframe space (SIFS).
1	STA senses that the wireless medium is free.
6	After RTS is successfully transmitted, AP will wait for the expiry of short interframe space (SIFS).
11	AP will wait for the expiry of short interframe space (SIFS).
2	STA will wait for the expiry of distributed interframe space (DIFS).
12	AP will transmit the acknowledgement packet.
4	STA will listen to the wireless medium to detect for any transmission.
9	STA will start its data transmission.
5	When the backoff interval counter reaches zero, STA will transmit RTS.
3	STA will start to decrease its backoff interval counter.

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Est. Length: 2:00:00 Time Taken:0:23:20 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

Page 1:

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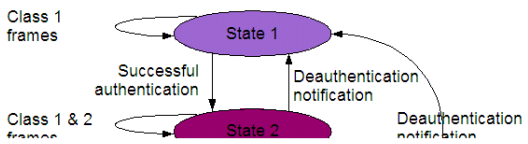
Question 5 (8 points) *Saved*

How does a Power-Save mode STA know that there are frames buffered at the AP?

- ( ) By reading the Transmit Indication Map (TIM) in the beacon frame
- ( ) By reading the Time Indication Map (TIM) in the beacon frame
- (•) By reading the Traffic Indication Map (TIM) in the beacon frame
- ( ) By reading the Transfer Indication Map (TIM) in the beacon frame

Question 6 (8 points) *Saved*

What values of two variables to keep track of the authentication and association status of a STA in State 2?

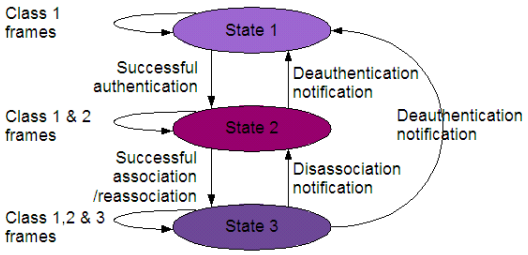


Est. Length: 2:00:00 Time Taken:0:23:28 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

Page 1:
1 2 3 4 5 6 7 8 9 10

Question 6 (8 points) *Saved*

What values of two variables to keep track of the authentication and association status of a STA in State 2?



- ○ unauthenticated and unassociated
- ◉ authenticated and unassociated
- ○ authenticated and associated

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Question 7 (8 points) *Saved*

What is purpose of physically sensing the channel in CSMA/CA without RTS/CTS?

- ○ To prevent STAs from transmitting immediately after the end of transmission of the previous packet.
- ○ To prevent STAs from transmission once the channel becomes idle.
- ○ To prevent STAs from transmitting a long packet.
- ◉ To prevent STAs from transmission when the channel is busy.

Question 8 (12 points) *Saved*

Which of the following is/are TRUE for WLAN securities?

- ☑ In IEEE 802.11 WLAN, a Service Set Identifier (SSID) of the network has to be configured at all its APs for authentication.
- ☑ WPA encryption employs the temporal key integrity protocol (TKIP) that uses a 48-bit hashed initialization vector and also changes the key after a user-specified amount of time.

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Page 1:
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Question 8 (12 points) *Saved*

Which of the following is/are TRUE for WLAN securities?

- ☑ In IEEE 802.11 WLAN, a Service Set Identifier (SSID) of the network has to be configured at all its APs for authentication.
- ☑ WPA encryption employs the temporal key integrity protocol (TKIP) that uses a 48-bit hashed initialization vector and also changes the key after a user-specified amount of time.
- ☐ WEP encryption is more secure than WPA encryption in WLAN technology.
- ☐ WPA-PSK uses a same encryption key for each client device, for each packet, for each session, unlike WEP, which only varies the 24-bit IV.
- ☑ Shared Key authentication (WEP) is more secure than Open System authentication
- ☑ WEP encryption uses a 24-bit initialization vector (IV) for either 64-bit encryption or 128-bit encryption.

Question 9 (8 points) *Saved*

Which one of the following services is used to enable data encryption between different STAs?

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Question 9 (8 points) *Saved*

Which one of the following services is used to enable data encryption between different STAs?

- ( ) Authentication
- (•) Privacy
- ( ) MSDU delivery
- ( ) Deauthentication

Question 10 (12 points) *Saved*

Which of the following statements are TRUE for Point Coordination Function (PCF) and Distributed Coordination Function (DCF)?

- [ ] PCF is used during the Contention Period (CP).
- [x] PCF requires the AP to perform the role of a polling master.

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Est. Length: 2:00:00 Time Taken:0:24:02 KHIU KIM HONG EEE-DEEE-FT-3A-06: Attempt 2

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- ( ) Deauthentication

Question 10 (12 points) *Saved*

Which of the following statements are TRUE for Point Coordination Function (PCF) and Distributed Coordination Function (DCF)?

- [ ] PCF is used during the Contention Period (CP).
- [x] PCF requires the AP to perform the role of a polling master.
- [x] The interframe space used in DCF is DIFS.
- [x] The interframe space used in PCF is PIFS.
- [ ] DCF is used during the Contention Free Period (CFP).
- [x] PCF and DCF can be used simultaneously in a BSS.
- [ ] PCF and DCF can operate in all APs and all STAs.
- [ ] PIFS has a longer interval than DIFS