# **Quiz Summary**

Section Filter ▼

**止** Student analysis

<u>III</u> Item analysis

(µ) Average score

High score

Standard deviation

( Average time

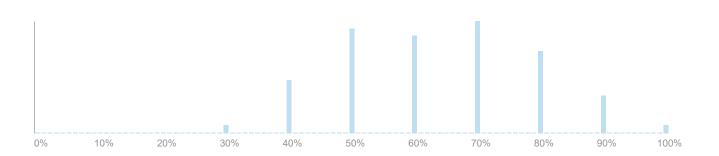
64%

100%

30%

1.55

24:33



### **Question Breakdown**

Attempts: 67 out of 67

Which of the following statements about Amplification (D)DoS attack is WRONG?

+0.4

Discrimination

Index ?

Amplification attack often misuses open

DNS resolvers on the Internet

0 %

Amplification attack utilizes a large number of bots.

1 respondent

1 %

To counter amplification attack, prevention of IP spoofing is effective.	20 respondents	30 %
Blocking incoming DNS traffic is a good solution to counter amplification attack.	44 respondents	66 %
None of the above	2 respondents	3 %
66%		

Attempts: 67 out of 67

answered correctly

Recall SIFF studied in Week 9 lecture. Which of the following will NOT increase the difficulty DoS attack?

## +0.48

Discrimination

Index (?)

Increase the number of SIFF routers between the source and destination	4 respondents	6 %
Increase the number of valid (active) keys maintained on each SIFF router at each time slot	17 respondents	25 <sup>%</sup>
Increase the size of router marking	22 respondents	33 %
None of the options 1-3 above	17 respondents	25 %
All of the options 1-3 above	7 respondents	10 %
25%		
answered		
correctly		

**40.38** 

#### Which of the following statements is CORRECT about SIFF?

Discrimination Index ②

SIFF enables the reciever to select who can send a privileged traffic to it.	53 respondents	<b>79</b> %
If any of the routers en route is not SIFF- capable, SIFF does not reduce (D)DOS traffic at all.	2 respondents	3 %
SIFF routers need to establish a (shared) secret key with the source.	6 respondents	9 %
Collusion with a SIFF router closer to the source can significantly reduce attackers' effort to guess capability.	2 respondents	3 %
None of the above	4 respondents	6 <sup>%</sup>
79%		
answered		
correctly		

Attempts: 67 out of 67

Recall Crossfire attack studied in Week 9 lecture. Which of the following statements is WRONG?

#### +0.31

Discrimination

Index ?

Crossfire attack typically starts with collecting route information by using a tool		0 %
like traceroute		
Crossfire attack targets links with high flow density.	10 respondents	15 %
Crossfire attack changes target links over time.	5 respondents	7 %
Crossfire attack uses a large number of	23 respondents	<b>34</b> %

bots to send traffic to servers in the

target area.

None of the above. 29 respondents  $43^{\%}$ 

34% answered correctly

Attempts: 66 out of 67

Assume you are running a server in the target area of Crossfire attack. Which of the following is a good countermeasure against Crossfire attack?

#### +0.45

Discrimination

Index ?

Trace back the sources of the traffic and filter them.	17 respondents	25 %
Enhance the server's computatioal power and network bandwidth.	1 respondent	1 %
Block traceroute	12 respondents	18 <sup>%</sup>
Block DNS traffic	1 respondent	1 %
None of the above.	35 respondents	<b>52</b> %
No Answer	1 respondent	1 %

52% answered correctly

Attempts: 67 out of 67

Which of the following statements is correct about anonymity on the Internet?

3 %

#### +0.33

Discrimination

Index (?)

Anonymity can be attained by encryption		0 %
Secure communication (e.g., TLS) can hide who is communicating with whom.		0 %
Anonymity is often demanded for freedom of speech.	64 respondents	96 %
Anonymity still ensures accountability.	1 respondent	1 %

96% answered correctly

None of the above.

Attempts: 67 out of 67

Recall MIX studied in Week 10. Which of the following statements is CORRECT about MIX?

2 respondents

#### +0.39

Discrimination

Index ?

MIX relies on symmetric key encryption.		0 %
MIX is designed to ensure sender anonymity.	56 respondents	84 %
MIX requires TLS for each communication.	1 respondent	1 %
In Mixnet (Mix cascade), anonymity cannot be provided if less than half of the MIX servers are honest.	3 respondents	4 %
None of the above.	7 respondents	10 %

84% answered correctly

Attempts: 67 out of 67		+0.56
Which of the following statements is 0	CORRECT about Tor	? Discrimination Index ②
Tor Proxy (client software) establishes shared secret key directly with all Tor routers on the circuit.	20 respondents	30 <sup>%</sup>
When a client (browser) is sending HTTP request to a web server via Tor, nobody but B can see the HTTP request in plaintext.	11 respondents	16 <sup>%</sup>
Tor can hide who is connecting to Tor network.	11 respondents	16 <sup>%</sup>
Tor can hide who is accessed via Tor network.	10 respondents	15 <sup>%</sup>
None of the above.	15 respondents	22 <sup>%</sup>
22% answered correctly		

Attempts: 66 out of 67			+0.35
Which of the following attack strategy is effective against Tor?		Discrimination Index ②	
Traffic analysis using timing and packet size	5 respondents	7 %	
Hacking of directory servers	1 respondent	1 %	
Deployment of malicious routers		0 %	
Routing attack		0 %	

All of the above. 60 respondents 90 %

No Answer 1 respondent 1 %

90%

answered correctly

Attempts: 67 out of 67

Which of the following statement is CORRECT about Hidden Services in Tor?

#### +0.21

Discrimination

Index ?

Hidden services are often used for illegal purposes.	60 respondents	90 %
Rendezvous Point knows the server's IP address.		0 %
Rendezvous Point knows the client's IP address.	2 respondents	3 %
Client can find the server's IP address from the Tor directory server.	3 respondents	4 %
All of the above.	2 respondents	3 %

90% answered correctly