

# LAST DAY QUIZ

August 26th, 2006

- (1) Choose the correct order of OSI model's layer name from top to bottom.
  - a. application, presentation, session, transport, data link, network, physical
  - b. application, presentation, session, transport, network, data link, physical
  - c. application, session, presentation, transport, network, data link, physical
  - d. application, session, presentation, network, transport, data link, physical
- (2) Choose one layer that does not belong to the TCP/IP model.
  - a. internet
  - b. application
  - c. session
  - d. network access
- (3) What is the IP address range usable for hosts on 202.249.25.32/27 network?
  - a. 202.249.25.32-202.249.25.63
  - b. 202.249.25.33-202.249.25.63
  - c. 202.249.25.33-202.249.25.62
  - d. 202.249.25.32-202.249.25.64
- (4) Which one of these address spaces that is not for private network?
  - a. 20.0.0.0/8
  - b. 10.2.2.0/24
  - c. 192.168.0.0/16
  - d. 172.16.128.0/17
- (5) What part(s) of an IP packet is changed when it is forwarded by a router?
  - a. MAC address
  - b. TTL
  - c. Destination address and TTL
  - d. Source address and TTL
- (6) Choose the routing protocol that is not an interior gateway protocol.
  - a. OSPF

- b. RIP
  - c. RIPng
  - d. BGP
- (7) Which method is used by PIM-SM to build multicast trees?
- a. Flooding and prune
  - b. Link state
  - c. Explicit join and leave
  - d. Distance vector
- (8) What is the command to configure network interface parameters?
- a. netstat
  - b. ifconfig
  - c. ndp
  - d. ping
- (9) What is the use of arp command?
- a. To show ARP packets
  - b. To display kernel routing cache table
  - c. To display and control mapping between MAC address and IP address
  - d. To accelerate repetitive process
- (10) Which one of these IP addresses is correct for a next-hop address?
- a. fe80::207:e9e9:ef05:ba6f
  - b. fe80::207:e9ff:fe05:ba6f
  - c. 20:1:fe80::2e0:81ff
  - d. 200:d30:12:100::1
- (11) How many networks can be assigned from 2001:d30::/48
- a. 65536
  - b. 16
  - c. 4096
  - d. 48
- (12) When a router receives an IP packet whose destination is not the router and the Hop Limit is 1, what must it do?
- a. Silently discard packet
  - b. Forward packet with Hop Limit 1
  - c. Forward packet and send an ICMP error to the source of the packet
  - d. Discard the packet and send an ICMP error to the source of the packet
- (13) What are not the results of exchanging OSPF Hello messages on an Ethernet LAN?

- a. Elected DR
  - b. Elected BDR
  - c. Full-adjacency
  - d. OSPF neighbor list
- (14) Which one is not an OSPF neighbor state?
- a. Init
  - b. Full
  - c. Exchange
  - d. Open
- (15) Which one doesn't correctly describe multicast address ff15::100?
- a. Site-local multicast address
  - b. Transient multicast address
  - c. Unqualified multicast address
  - d. Cannot be used as an interface address
- (16) What message is sent by a leaf router in the phase one of PIM-SM routing?
- a. Join(\*,G)
  - b. Join(S,G)
  - c. Prune(S,G,rpt)
  - d. Prune(\*,G)
- (17) What don't we see when we run `netstat -nr -f inet6` command?
- a. Next-hop router
  - b. IPv4 address
  - c. Destination address
  - d. Outgoing interface
- (18) Which command is to see the multicast forwarding cache?
- a. `netstat -s`
  - b. `netstat -g`
  - c. `netstat -na`
  - d. `netstat -r`
- (19) `09:20:35.126716 2001:d30:100::9.514>2001:d30:101:1::10.514: udp 70 (len 78, hlim 63)` is the result of running which command?
- a. `arp -d`
  - b. `tcpdump -n`
  - c. `tcpdump -e`
  - d. `tcpdump -vvn`

(20) What is the Zebra command to see all IPv6 routes installed in FreeBSD kernel?

- a. show ipv6 route
- b. show ipv6 route kernel
- c. show ipv6 running
- d. show ipv6 forwarding

(21) What is the ospf6d command to display all OSPFv3 routers on the same links?

- a. show ipv6 interface
- b. show ipv6 neighbor
- c. show ipv6 ospf6 route
- d. show ipv6 ospf6 area

(22) On XORP, below are the results of running which command?

DestPrefix	NextHopRouter	VifName	VifIndex	MetricPref	Metric
::/0	fe80::2e0:81ff:fe03:2a52	fxp0	0	254	65535
::/64	e80::2e0:81ff:fe03:2a52	fxp0	0	254	63353

- a. show pim6 mfc
- b. show pim6 interface
- c. show pim6 mrrib
- d. show pim6 join

(23) On XORP, below are the results of running which command?

Group	Source	RP
ff05::3b6	2001::d30:10102:20a:48ff:fe02:9fb1	2001:d30:101:5::1
	Incoming interface : fxp0	
	Outgoing interfaces : .0.	
ff05::1151	2001::d30:10102:20a:48ff:fe02:9fb1	2001:d30:101:5::1
	Incoming interface : fxp0	
	Outgoing interfaces : .0.	

- a. show pim6 mfc
- b. show pim6 join
- c. show pim6 bootstrap
- d. show pim6 rps

(24) Choose the technology which is NOT described as the infrastructure technology of UDLR specification.

- a. Link Layer Tunneling Mechanism
- b. Broadcast Emulation
- c. Address Resolution Protocol
- d. Dynamic Tunnel Configuration Proctol

(25) Choose the appropriate description as the purpose of UDLR.

- a. UDLR is a technology for building virtual private network among multiple nodes belonging to different subnets.
  - b. UDLR is a technology for automatically configuring adjusting tuner setting of satellite receivers.
  - c. UDLR is a technology for emulating Broadcast-Capable Multiple Access link on a uni-directional link.
  - d. UDLR is a technology for emulating Non-Broadcast Multiple Access link on a uni-directional link.
- (26) Choose the appropriate IP address with which the receive router activates NAT.
- a. The global IP address which is assigned by AI3 project and given to BDL I/F of the receive router.
  - b. The global IP address which is assigned by the local ISP or campus network and given to BDL I/F of the receive router
  - c. The global IP address which is assigned by AI3 project and given to UDL I/F of the receive router
  - d. The private IP address which is given to UDL I/F of the receive router to communicate with the satellite receiver
- (27) Choose the NOT appropriate description based on the AI3 security policy.
- a. Only public key authentication is allowed as the authentication method for SSH remote login.
  - b. Password authentication is allowed as the authentication method for SSH remote login.
  - c. SSH remote login as “root” is prohibited.
  - d. FTP is not allowed to transfer a file on the network.
- (28) Choose the appropriate IP address which is used to access UDBox for the first time.
- a. 172.31.3.1/16
  - b. 192.168.0.1/24
  - c. 202.249.25.193/27
  - d. 202.249.25.236/27
- (29) Choose the parameter which is NOT changed on the UDBox tuner configuration.
- a. Tuner Frequency
  - b. Satellite Frequency
  - c. High Band Offset
  - d. Symbol Rate
- (30) Choose the appropriate description for checking the receiving status of satellite carrier on UDBox.
- a. Check “Routing -> Static Route” on UDadmin.
  - b. Check “Network -> IP -> xl0” on UDadmin

- c. Check “Network -> UDL -> FBIP Gateway” on UDadmin
- d. Check “Network -> Interfaces -> pty0” on UDadmin

(31) Which one if not correct?

- a. Only host name setting in /etc/sysconfig/network will make this hostname known by other machines.
- b. Your SOI server can resolve IPv4 and IPv6 address.
- c. Named is service on your SOI server that does DNS resolving.
- d. if you want your server to be known by other hosts as hello-soi.ai3.net, you should inform to AI3 to register this domain name.

(32) What does not mean Real server is now running on your SOI server?

- a. 

```
#ps -ax|grep hlserver
1884 ?          S          0:00   /usr/local/rmserver/Bin/hlxserverplus
/usr/local/rmserver/hlxserverplus.cfg --dfc --hbi 202.249.26.2
```
- b. 

```
#netstat -an|grep 554
tcp          0          0  :::554                ::: *
LISTEN
tcp          0          0  ::ffff.202.249.26.2:554  ::ffff.202.249.26.2:404614
TIMEWAIT
```
- c. 

```
#nslookup www.soi.wide.ad.jp ::1
Server: 127.0.0.1
Address: 127.0.0.1#53
Non-authoritative answer:
www.soi.wide.ad.jp canonical name = asari.soi.wide.ad.jp
Name: asari.soi.wide.ad.jp
Address: 203.178.138.99
```
- d. 

```
#!/sbin/service rmserver start
Starting rmserver: OK
```

(33) If you cannot get a file through MTM, and you see that MTM service is still running on server, how do you troubleshoot?

- a. Check DNS, SMTP, HTTP service are running.
- b. Check Unicast IPv4, Unicast IPv6, Multicast IPv4 and Multicast Ipv6 are running well.
- c. Check Disk usage, SSH, Real server service are running.
- d. Use yum to upgrade system.

(34) What is the HTTP DocumentRoot of SOI Asia server? If you want to access a class material on “/soi/soi/class/20040034/materials/hello.ppt”, what is the URL?

- a. /var/www/html, http://SOI\_SERVER\_IP/materials/hello.ppt
- b. /soi/soi, http://SOI\_SERVER\_IP/class/20040034/materials/hello.ppt
- c. /soi, http://SOI\_SERVER\_IP/soi/class/20040034/materials/hello.ppt

- d. /soi/soi/class, http://SOI\_SERVER\_IP/20040034/materials/hello.ppt
- (35) What is not correct about HTTP Cache proxy setting?
- a. Service port is 3128
  - b. Squid graph usage is at http://SOI\_SERVER\_IP/squid/
  - c. Service should not open to outsider, therefore there is an access list(acl) in squid.conf to limit access from local SOI Asia network only.
  - d. sfc-cache.ai3.net is not a parent cache.
- (36) What can not be done by Mixer/Echo canceller setting?
- a. Better audio quality
  - b. Reduce echo
  - c. Flexible audio adjustment
  - d. Adjustable sending audio bandwidth
- (37) During SOI Asia realtime lecture, what are the two application choices to receive/send video/audio? What is the usage difference?
- a. RPT and IRC. RPT is for powerpoint synchronization. IRC is for staff communication.
  - b. Real and Windows media. Real is for archive course, Windows media is for realtime course.
  - c. VIC/RAT and Windows media. VIC/RAT is for two-way(or more) video/audio communication, Windows media is only for one-way video-audio receiving.
  - d. IRC and MSN. IRC is official and for group communication, MSN is to contact other staff in emergency.
- (38) What is not correct mapping between application and required network service?
- a. VIC/RAT : IPv4 Unicast, IPv6 Unicast, IPv4 Multicast, IPv6 Multicast
  - b. Windows media : IPv4 Unicast, IPv6 Unicast, IPv4 Multicast, IPv6 Multicast
  - c. RPT : IPv4 Unicast
  - d. IRC : IPv4 Unicast, IPv4 Multicast