Programming:
Q1) What is your favorite scripting/programming language(s)? Why ?

Q2) General CS, algorithms Q&A: 5 minutes

Q3) Data structures - discuss possible implementations and applications:

Binary tree
Hash map
Heap
Q4) Complexity classes - discuss and give examples:

Linear
Polynomial
NP Complete / NP Hard
Q5) Sorting algorithms - discuss:

What is the fastest sorting algorithm?
What is the complexity of quick sort?
Q6) Distributed systems:

What's Paxos?
What's Raft?
What's consistent hashing?
Q7) Hands-on coding:

Inverse a string in place
Q8) Deep Concept of DP and Graphs:

Q9) Development Coding Questions.

Q10) Describe a dev/test/production workflow using GIT

Feature branching vs trunk based development
Advantages of requiring pull requests and approvals
Q11) More on Front-end Developer Job Interview Questions

OS-LINUX:
Q1) How can you view running processes?

ps aux
top(htop)
Q2) How do you check server uptime?

uptime
top
Q3) How do you start/stop services?

(deprecated) service start/stop service_name
systemctl start/stop service_name
Q4) How do you display the shell's environment variables?

env
printenv
Q5) What does #!/bin/bash at the top of a script do?

It say to shell, what interpreter to use when run this script
Q6) What does "&" after a command do?

It run command in background
Q7) What does piping commands mean?

piping with '|' transfer stdout of one command to another, for example, ps aux |
grep httpd - first command show all running processes, then, transfer stdout to
stdin of second command, whose find only strings where 'httpd'.
Q8) What distributions have you used on servers?Why?

Ubuntu - very fresh kernels and packages
CentOS/RHEL - Enterprise and stability
Q9) What is your favorite editor?

Q10) What is RAID? What is RAID0, RAID1, RAID5, RAID10?

Q11) Describe the general file system hierarchy of a Linux system.

Q12) Describe what each of the following command line utilities do:

tee
awk
tr
cut
curl
tail
sed
Q13)Command line demo:

Search for "my konfu is the best" in all *.py files
Replace the occurrence of "my konfu is the best" with "I'm a linux jedi master" in
all *.txt files
Find all files which have been accessed within the last 30 days
Q14) What is the difference between virtual memory and swap ?

Q15) What is the difference between hardlinks and symlinks?

Q16) What is an inode and what fields are stored in an inode?

Q17) What are zombie processes ?

Q18) Can you have several HTTPS virtual hosts sharing the same IP?

Yes, I can. I can setup several virtual hosts on one IP and split up yhem with
different ports.
Q19) What is the difference between processes and threads?

Q20) What is the difference between exec and fork?

Q21) How nginx can handle a lot of connections? What does it use inside?

Example of answer: Eventloop.
Q22) What is "nohup" used for?

Q23) What is an atomic operation?

Q24) I've added my public ssh key into authorized_keys but I'm still getting a
password prompt, what can be wrong?

Q25) How do you catch a SIGHUP ? What about SIGSEGV ? What about SIGKILL ?

Q26) What is the Linux Kernel OOM and how does it work ?

Q27) What's a chroot jail?

Q28) Describe the Linux boot process with as much detail as possible, starting from when the system is powered on and ending when you get a prompt.

Q29) What's LD_PRELOAD and when is it used?

Q30) You ran a binary and nothing happened. How would you debug this?

I run binary with strace, for example: strace binary_name
Q31) When can a socket receive E_AGAIN ?

Q32) What is a dynamically/statically linked file?

Q33) A careless sysadmin executes the following command: chmod 444 /bin/chmod - what do you do to fix this?

Q34) I've lost my root password, what can I do?

Q35) You have accidentally deleted a running script, how could you restore it ?

Q36) What load balancers have you used ?

Q37) AWS:

What is the difference between an AMI and an instance ?
What's EBS ? What's an EBS snapshot ? What is the real cost of having an EBS snapshot ?
What's a VPC ?
What's the difference between a region and an availability zone ?
What's an ELB ?
What's S3 ? What are the features supported on S3 ?
Networking:
Q1) What is IPv6 ? Why should we care?

Q2) How does ping work ? What about traceroute ?

Q3) I type http://www.yahoo.com in my browser's URL bar and I press enter. What happens ? (discuss at every OSI layer - Physical, data link, network, transport, session, presentation, application)

DNS & anycast, IP, UDP, routing, BGP, TCP, HTTP, transparent proxy
What is BGP?
What's a PTR in DNS? Why should we care?
Q4) What if I change from http://www.yahoo.com to https://www.yahoo.com ?

Public/private certificates, CAs, proxying, MiTM, etc.
Q5) What happens when I press the send button in my email client ?

Q6) How do we prevent bots crawling ? How would you deal with a syn flood ?

Q7) How many hosts in a /24 network? What about a /22 ?

Q8) What is the difference between DNAT and SNAT ? When do you use either ?

Q9) What is a virtual IP address? What is a cluster?

Q10) What is IPv6 ? Why should we care?