

nformation

aste

–four

**Information is delicious !
“Information Taste” is a tasty IT test.
Hope you learn new things & enjoy !**

Bülent Yücesoy

2019

THIS BOOK HAS EXAM-LIKE FORMAT, BUT IT IS NOT AN EXAM , IT IS JUST A BOOK !

- Don't get surprised, it is really just a book, it is not an exam !
The main aim of this book is mentioning some key topics and helping you learn more & wonder more.
This book is not intended to make you a suffering exam.
Notes are preferred to be given in exam format, so exam is just a format, that's all.
If you agree this concept, then there are no question points, no exam duration limit etc.
You will decide how to answer the questions. (with internet or without internet)
Just try to understand and try to answer, don't google immediately from the very first beginning.
→ But if you want answering this test-book as an exam, you can read criterias below.
- Happy testing :)

IF YOU WANT ANSWERING THIS TEST-BOOK AS AN EXAM, YOU CAN READ CRITERIAS BELOW

- This book has 50 questions. So all true options in a question have a total point of 2.
- Total exam duration is 75 minutes. Passing score is at least 70 of 100.
- Exam is documentation/internet closed exam.
- Questions have one or many answers. Questions will ALWAYS say "SELECT ALL THAT APPLY".
Questions will NEVER say "SELECT n THAT APPLY (n = total true option number)"

SCORING ALGORITHM

Think that a question has 5 options (a,b,c,d,e) but answer set is "a" and "c".
Question must have totally "2 points", so "a" is "1 point" + "c" is "1 point".
This makes score of all false options (b,d,e) each having "-1 point" separately.

- * If you dont give any answer (empty question) - your score is already "0 point"
- * If you just answer "a"-> your score is "1 point"
- * If your answers are "a,b,c" -> your score is = $1 + (-1) + 1 = "1 \text{ point}"$
- * If your answers are "b,d,e" -> your score is = $(-1) + (-1) + (-1) = "-3 \text{ points}"$
- * If your answers are "a,b,c,d,e" -> score = $1 + (-1) + 1 + (-1) + (-1) = "-1 \text{ point}"$

Similar example can be given like below

4 options (a,b,c,d) exist for a question. 3 is correct. (a,b,d)

This makes each true option "0,66 point" , which makes any false option (c) having each "-0,66 point"

You can calculate your score accordingly.

- Happy examining :)

SOLUTIONS

- **Solutions are given but they are short descriptions, not whole all story.**

It is your homework to examine in detail if you wondered the rest of story.

If you really wondered something and examined it, this book will succeed its mission.

COMMENTS

- All comments, advises are welcomed in this non-profit hobby activity (bulent.yucesoy@gmail.com)
- **"Information taste" series will continue annually. I will care all comments. (thanks if you comment)**
- I will publish your summarized comments in my web site. (<http://web.itu.edu.tr/~yucesoyb/books>)

Question-1: Which program provides online kernel patching in Linux?

- a. rebootless
- b. uptrack
- c. ksplice
- d. fabric

Question-2: Select all CPU(s) having built-in protection mechanisms for memory based attacks.

- a. AMD EPYC
- b. Sparc M7
- c. Intel i7
- d. IBM Power9

Question-3: write-ahead Logging (WAL) provides which ACID features of databases?

- a. Atomicity
- b. Consistency
- c. Isolation
- d. Durability

Question-4: Database consistency does not consider which below database concept(s)

- a. Constraints
- b. Cascades
- c. Triggers
- d. Cardinality

Question-5: SQL Standard declares how many transaction isolation level?

- a. 2
- b. 3
- c. 4
- d. 5

Question-6: Select below algorithm belonging to different usage.

- a. SHA
- b. AES
- c. RSA
- d. BLOWFISH

Question-7: select all true statement(s)

- a. PEM files are Base64 encoded ASCII files.
- b. DER files are binary form of PEM, they are generally used in java.
- c. P7B files can't contain private keys
- d. PFX files can include all certificate chain and private key.

Question-8: Select all true "mainframe computing - distributed computing" matching.

- a. sysplex - domain
- b. tso/e - shell
- c. job - process
- d. task - thread
- e. bcp - kernel
- f. ipl - boot
- g. abend - crash
- h. abend - hang
- i. abend - failure

Question-9: Select all intrudets

- a. masquerader
- b. misfeasor
- c. clandestine user
- d. evasioner

Question-10: Select false Oracle database startup command

- a. startup nomount
- b. startup nolog
- c. startup restrict
- d. startup open recover

Question-11: Which is not IBM AIX term

- a. SPOT
- b. BOS
- c. IPLDEVICE
- d. HEKETI

Question-12: Basic Principles of OOD (Object Oriented Design) is abbreviated as what?

- a. WYSIWYG
- b. OOPS
- c. SOLID
- d. KISS

Question-13: Which is not a SCSI term

- a. source
- b. target
- c. PR
- d. PGR

Question-14: Select all true statement(s)

- a. RDBMS obey ACID, NoSQL obey BASE
- b. NoSQL has lower consistency than RDBMS
- c. NewSQL is NoSQL with ACID.
- d. NoSQL consistency is eventual if $R+W \leq N$, strong if $R+W > N$.

Question-15: Which is not an OpenStack component?

- a. Glance
- b. Swift
- c. EtcD
- d. Horizon

Question-16: Which below notation defines a computer algorithm's performance upper limit due to its input dataset size?

- a. Big-O notation
- b. Big-omega notation
- c. Big-Theta notation
- d. Little-O notation
- e. Little-omega notation

Question-17: Select all true statement(s) about Microsoft SQL Server

- a. data masking is hiding company sensitive data at sql query results
- b. data masking has two types like SDM and DDM
- c. shuffling algorithm can be used for data masking.
- d. SDM does not mask memory-optimized tables.

Question-18: Select all true statement(s) about swaps.

- a. linux never sends kernel pages to swap
- b. solaris sends inactive kernel modules to swap as the last option before thrashing
- c. solaris swapfs has a concept called virtual swap
- d. if needed you can configure encrypted swap on Linux with LUKS

Question-19: Select all Linux tools that can draw graphic due to given commands.

- a. gnuplot
- b. polyglot
- c. ctioga2
- d. rrdtool

Question-20: Select all true statement(s) about SMTP

- a. FROM address can be changed at SMTP
- b. MTAS use port 25.
- c. MSAS dont use SMTPS, they use TLS
- d. You may configure sendmail as an only SMTP client, there is no need to run sendmail server process to make it work

Question-21: Select all true statement(s) about PVLAN

- a. special backup subnet can be created using PVLAN
- b. PVLAN only works on access ports, not trunk ports
- c. enabling ACL configs on top of VXLANS make similar configuration like PVLANS
- d. PVLAN is same with microsegmentation

Question-22: Select all true statement(s) about Infrastructure as Code (IaC)

- a. Hashicorp Configuration Language can be used to program your infrastructure
- b. You can create infrastructure versions, immutable infrastructures etc...
- c. You can work more agile with IaC
- d. you can integrate your infrastructure to processes like TDD,CI,CD etc..

Question-23: Select softwares which are not Emulators

- a. Virtual tape library softwares
- b. Xterm console
- c. cygwin software on windows
- d. WINE software on Linux
- e. GNS3 networking software

Question-24: Select all metrics you would care when making a new investment in your company.

- a. TCO
- b. ROI
- c. IRR
- d. NPV

Question-25: which tool can't be used in CI/CD process

- a. Jenkins
- b. Bamboo
- c. TeamCity
- d. Papyrus

Question-26: which below command sets Turkish-Q keyboard at Linux Gnome Desktop

- a. setxkbmap tr
- b. loadkeys trq
- c. export LANG=tr_TR; export LC_ALL=tr_TR
- d. localedef -i tr_TR -f ISO8859-9 tr_TR

Question-27: which below term is not related with application architecture modelling

- a. SoR
- b. SoE
- c. SoI
- d. SoU

Question-28: which protocol below sits in a different category than others

- a. REST
- b. RPC
- c. SOAP
- d. all serve in same category

Question-29: Select all Linux tools that can make simultaneous SSH connections to a list of given servers at the same time

- a. mussh
- b. dsh
- c. pssh
- d. nssh

Question-30: Select all protocols that CURL supports

- a. TELNET
- b. LDAP
- c. IMAP
- d. POP3

Question 31: which below command supports SMB protocol usage

- a. elinks
- b. curl
- c. lynx
- d. wget

Question-32: Select all abbreviations below that have more than one expansion.

- a. AIDE
- b. RPM
- c. CPU
- d. RAM

Question-33: Select all true statement(s) about NTP

- a. NTP cares time drifts, SNTP does not.
- b. NTPD default panic threshold is 1000 seconds.
- c. NTPD can work both TCP and UDP
- d. Max synchronizable stratum is 15, 16 left as unsynchronized.

Question-34: select all correct "protocol/adaptor" matching(s)

- a. iSCSI/NIC
- b. FC/HBA
- c. FCoE/CNA
- d. IB/HCA

Question-35: Fill in the blank

LACP runs at ----- layer of the data center

- a. network
- b. application
- c. access
- d. core

Question-36: which is not a feature of polymorphic virus?

- a. makes operational copies of itself at many different places
- b. can vary its instructions with some noises, bogus instructions or RNG.
- c. can create different versions of itself, each with different encryption/decryption schemes.
- d. integrates itself between antimalware software and operating system

Question-37: which is most wanted case for software modules in programming?

- a. Low cohesion, low coupling
- b. High cohesion, high coupling
- c. Low cohesion, high coupling
- d. High cohesion, low coupling

Question-38: Select all true statement(s) about IPv6

- a. IPv6 has more advanced routing parameters than IPv4
- b. IPsec is already integrated inside IPv6 protocol stack
- c. IPv6 does not require NAT to extend its address space like IPv4
- d. QoS priorities are better for VoIP at IPv6

Question-39:

Select all general purpose parallel programming models for shared memory environments

- a. pthreads
- b. OpenMP
- c. MPI
- d. OpenACC

Question-40: select all needed steps to make a data-driven transformation in company

- a. have a data strategy
- b. build your data landscape inside company
- c. provide data democratization
- d. believe in value of data science outcomes

Question-41: which is not a necessary tool for a software reverse engineer in linux?

- a. od
- b. nm
- c. as
- d. at

Question-42: select all techniques that are used in compiler optimizations

- a. dead code elimination
- b. selective scheduling for instructions
- c. identical code folding
- d. block reordering

Question-43: which is not a Bluetooth attack?

- a. bluejacking
- b. bluesnarfing
- c. blueprinting
- d. bluebugging

Question-44: which command must exist at your Linux server to take Linux X11 GUIs to your windows PC through SSH connection?

- a. xclock
- b. xvfb
- c. xauth
- d. xterm

Question-45: which is not a Linux data analytics tools

- a. DataMelt
- b. Knime
- c. Orange
- d. wekan

Question-46: select all true statement(s) about ABAC

- a. ABAC is attribute based access control
- b. ABAC is policy driven
- c. XACML language can be used at ABAC
- d. ABAC is dynamic, content-aware and risk-intelligent

Question-47: select all true statements about NFS

- a. NFSv3 is a stateless protocol
- b. NFSv4.2 is a stateful protocol
- c. NFSv4.2 includes pNFS feature
- d. NFSv4.2 includes ACL permissioning
- e. NFSv4.2 can be kerberized

Question-48:

which below linux command solve below error message without server reboot?
"/data1: NFS stale file handle"

- a. mount -o remount,rw /data1
- b. fuser -ck /data1
- c. service autofs restart
- d. umount -lf /data1

Question-49: Select all true about SNMP

- a. select all true about SNMP
- b. SNMP can work both TCP and UDP on ports 161-162
- c. Use complex community strings at SNMPv2
- d. SNMP over DTLS ports are 10161 and 10162
- e. SNMPv3 authentication and encryption with MIB whitelisting is most secure usage

Question 50: Select all true statement(s)

- a. Unicast communications can only work with TLS, not DTLS
- b. Multicast communications can only work with DTLS, not TLS
- c. Multicast communications can only work with DTLS, not TLS
- d. Anycast communications can mostly work with DTLS, but also probable with TLS

SOLUTIONS

Solution-1: Correct answer is "c".
Solution-2: Correct answers are "a" and "b". This way AMD & Sparc did not hit Meltdown
Solution-3: Correct answers are "a" and "d"
Solution-4: Correct answer is "d".
Solution-5: Correct answer is "c"
Solution-6: SHA is hashing algorithm, all others are encryption algorithm.
Solution-7: all true
Solution-8: all true
Solution-9: Correct answer are "a", "b" and "c".
Solution-10: Correct answer is "b"
Solution-11: Heketi is used inside Glusterfs.
Solution-12: 5 principles of OOD is called SOLID. There is nothing like OOPS.
KISS= Keep It Simple Stupid / WYSIWYG = What you see is what you get
Solution-13: Source is called as INITIATOR in SCSI.
Solution-14: all true
Solution-15: Etcad is in OpenShift, not OpenStack.
Solution-16: It is Big-O notation
Solution-17: all true
Solution-18: all true. Option B is called HARD SWAPPING in Solaris
Solution-19: Correct answers "a", "c" and "d". There is nothing like polyglot.
Solution-20: all true
Solution-21: All true except D
Solution-22: all true
Solution-23: WINE and GNS3 are not emulators, all others emulate.
Solution-24: all true
Solution-25: Papyrus is UML design tool
Solution-26: Answer is "a"
Solution-27: There is nothing like SOU.
others are "System of Record" / "System of Engagement" / "System of Integration"
Solution-28: REST is API technology. All others are SOA technologies
Solution-29: All true except D. There is nothing like nssh.
Solution-30: All supported
Solution-31: elinks also supports SMB
Solution-32: AIDE = "Advanced Intrusion Detection Environment" or "Android IDE"
RPM is "RedHat Package Manager" or "Round Per Minute"
CPU is "Central Processing Unit" or "Critical Patch Update"
RAM is only "Random Access Memory"
Solution-33: All true except C. NTPD cant run TCP, it is only UDP
Solution-34: all true
Solution-35: LACP is Access layer
Solution-36: D is "tunneling virus". A-B-C are polymorphic virus.
Solution-37: Correct answer is "d"
Solution-38: all true
Solution-39: MPI is for distributed memory environments.
OpenACC is special for accelerators, not for general purpose
Answers are PTHREADS and OPENMP
Solution-40: all true.
Solution-41: at is for scheduling jobs, it is unnecessary
Solution-42: all true.
Solution-43: There is nothing like Blueprinting
Solution-44: Correct answer is "c"
Solution-45: wekan is kanban tool. weka is data analytics tool.
Solution-46: all true
Solution-47: all true
Solution-48: umount can help with lazy and force options.
Solution-49: all true except A. SNMP is only UDP
Solution-50: All true.
Unicast is TCP.
Multicast and Multicast are UDP
Anycast is generally UDP but can also be implemented in TCP
TLS only works with TCP
DTLS only works with UDP

Bulent Yucesoy was born in Ankara at 16.04.1982.

He went to elementary school and middle school at Izmir.
(1988-1996)

He later on was accepted to Izmir Science High School. (1997-2000)

He won university and entered ITU Computer Engineering Department.
(ITU = Istanbul Technical University)

He loved computer engineering and continued at same university for his master degree (2004-2007) after he finished bachelor.
(2000-2004)

While making master education, he also worked at university IT office (www.bidb.itu.edu.tr).

After his military service, he worked for 2 years at Kocnet Telecom (Vodafone acquired it) company (2008-2010).

Afterwards he joined Garanti Technology and he is working there since 2010. (www.garantiteknoloji.com.tr)

He likes details, thinks that devil hides inside details.

He loves his wife Ipek, his son Cagan and lastly he loves learning. (that's why he thinks information is delicious.)

This book is for people who also loves learning.

Hope you also like the book.

You can send comments to bulent.yucesoy@gmail.com

Let's summarize Bulent's philosophy with a wonderful Ataturk's saying. It is valid for all the world, all the people;

"If you love your country, do your best in your job"

