IO Recoverable schedule? 2. Simple Two-way Merge Sor + Ixample + cost? TI. TA TZ Is this exec. sorrible under 1) lock-X(A) Strict 2 PC? R(A) W(A) lock-X(B Justify! RCB) W(B) E in 2PL R(C) W(C) (la fel ca so exemple 3 la fel ca se exemplu @ R1[10, C1, C2, C3] R2 [10, (7, C9, 10 Rel 1)] R1: 100.000 records, 40 records / rage RZ: 10.000 records, 50 records/rage a) 100 Buffer Pages available R1 @ R21.10 = Rel2.10 Mel1 Cost with: - rort marge join - Rash join sage oriented rested loops join

10, (2 si (3 Noved at Bucharest Describe eval of the guery: SELECT AVECCZ) FROM R1 WHERE C12=9 III O To revert SQL injection attack: A a) data validation is surfamed will regular seguinions B &) statements are parameterized a) string regardors are preceded with " " d) users are asked nicely not to commit on attack @ To and To are a concurrent transactions. The final result result of their execution must be identical to the result

obtained when executing:

a) only T1

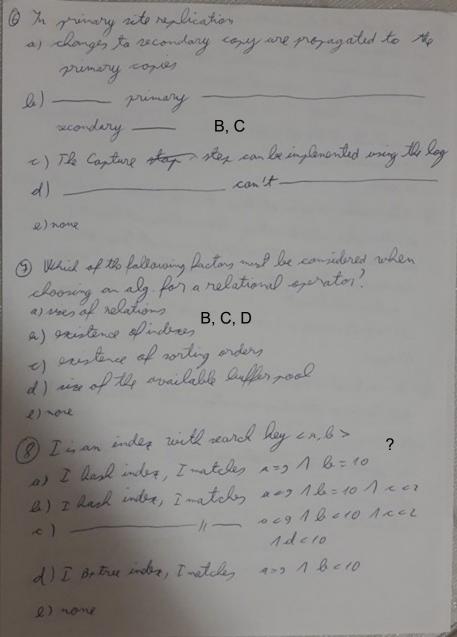
le) only 72

a) other TI or Tz, but not both

Dd) To followed by Te, or Te followed by To

e) none of the above answers is correct

3 & the strict CPC protocol:
a) locks are rever used
a) locks are never used le) locks are used to control concurrent access to data e) transaction T can ask for a new lock after it
the to Transle for a new lock after it
c) plansaches 1 con 1
released a lock
released a lock d) all the locks of a transaction are released when it
Eampleus execution B, D
e) none
1) role of ARIES of The REDO phase of ARIES of The system crashes at time & The REDO phase of ARIES
a) identifies at the work is at time to b) brings the DB to the state it was in at time to were c) undoes the changes of transactions that were B sau E?
1. IN rugances of ~
octive at line t B sau E?
d) ARIES deen 4 include a REDO place
l) none
3 In vertical fragmentation A, C
of man fourter overator is the valural your
a the recomposition
e) fragmentation is performed with projection selection
a totiar is performed will projection
a) fragmentation is 1940 selection
21
e) none
2) ~~~



(B) Under READ COMMITTED
a) dirty reads occur
0) -1- NOT -1- B, C
a) mo nonrepertable reds occur
d)
o) none
(10) Consider
Select * F R 111011
W R.C > 1000'
The cost is:
a) 9 E/o
b) 90 ?
c) 1/90
d) 1/9
e) none (b) When endoing the change of on Update lag record: (c) When endoing the change of on Update lag record: (a) a Commit log record is wrutten on this the lag
(When endoing the change of the an thist the lag
as a Commit log record is willen
d) no log records wither?
e) none

(12) In dala replication:
a) voting = sync. A, D
le) voting = Async.
d) DID - Async. (per-ta-peer)
d). DZP = Async
(13) Which of the alg. below was indexing techniq
(13) Which of see arg. The
os sort-merge-jain B
a) index nested loops join B
c) jagl - oriented wited loops join d) last join
e) none
(4) System catalog maintain at least:
a) relating cardinality are my
2) 1.
I ender transcendence
d) index height
e) none