IO recovarable schedule? 2. Simple Two-way Merge Sor + Ixample + cost? TI. TA TZ Is this exec. soruble under 1) lock-X(A) Strid 2 PC? RIAI W(A) lock-X(B Justify! RCB) W(B) 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 jain rage oriented rested loops join

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Describe eval of the guery: SELECT AVECCZ) FROM R1 WHERE C12=9

III @ To revert SQL injection attack: a) data validation is surformed will regular segressions

b) statements are parameterized

a) string regarators are preceded will " d) users are asked nicely not to commit in 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

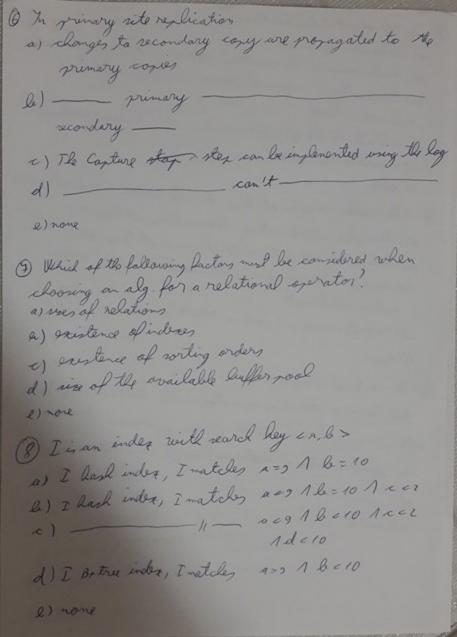
le) only 72

a) other TI or Tz, but not both

d) To followed by TE, or TE followed by To

e) none of the above answers is correct

3 In the strict CPC protocol:
a) locks are sever used
1.) locks are used to control concurrent access to data
a) locks are sever used le) locks are used to control concurrent access to data e) transaction T can ask for a new lock after it
released a lock
released a color of a branchin are released when it
released a lock d) all the locks of a transaction are released when it
completes execution
e) none
1) real of ARIES O The REDO phase of ARIES of The rystem crashes at time & The REDO phase of ARIES
b) brings to 00 to to al transactions that were
e) lings the OB to the start transactions that were
active at line t
d) ARIES doesn't include a REDO place
2) none
a 44.
3 In vertical fragmentation is the natural join
(3) To vertical fragmentation operator is the natural join an anion
union
(a) - informed with projection
e) fragmentation is serformed with projection selection
d) — "-
a' —
e) none



(B) Under READ COMMITTED
a) dirty reads occur
0) -1- 107-11-
a) mor nonregertable reds occur
d)NOT-11-
o) none
(10) Consider
Select * F R 111041
W R.C > 10%
The cost is:
a) 9 I/o
b) 90
c) 1/90
d) 1/9
e) none 6) When endoing the change of on Update lag record: a) a Commit log record is wrutten on this the lag
(i) When endoing the change of the on this the lag
a Commit log record is willen
C vesch AN
d no log records written
d 1 ~ o red
e) none

(2) In data replication:
a) voting = sync.
le) voting = Async.
d). PIP = sync. (per-ta-per)
o) noul
(3) Which of the alg. below was indexing technique
al sort-merge-years
a) index rested loops join
c) jagl - oriented wited loops join d) last join
e) none
(14) System catalog maintain at least:
a) relation cardinality and made
1) idea 11-
1) ender transcendence
d) index height
e) none