

16 May 19

# Final. suggestion DOMS

Sec-A

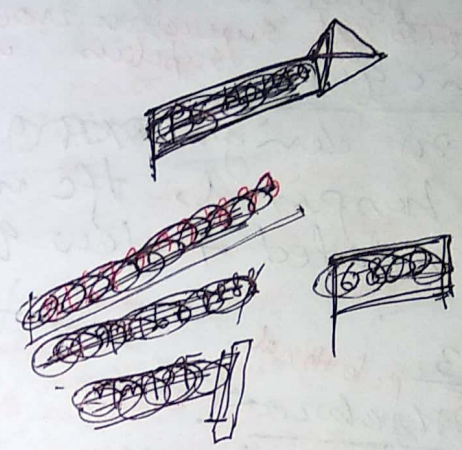
Sec B

1. mut - SQL ch-4  
+ 10mk (ch-2)

SQL of 20 mk  
nested query

(no procedural, union,  
PL/SQL) ब्रह्मचरि मर्त्य

2. upto ch-6



ch-1,

Levels of Data abstraction  
instance, <sup>concept</sup> schema, <sup>concept</sup> abstraction अवधारणा

— Data DDL, DML, Diff between them

— Procedural, non procedural language DDL

— Data administration <sup>error</sup>

Overall <sup>SY</sup> structure, query + prism management  
slide-21 अवधारणा मर्त्य Diagram

ch-2

attr's relation, candidate key, pri<sup>many</sup> key, s<sup>upper</sup> key,  
weak entity set, gen<sup>generalization</sup>, splization, include attribute  
inheritance.

constraints - अवधारणा  
condition to अवधारणा gp / condition defined  
user defined.

Disjoint, overlapping

total, partial, — slide-42 अवधारणा मर्त्य  
subgroup class अवधारणा participate — total. | subgroup  
— अवधारणा — partial



slide 59,60  
 \* table & strong rep are not  
 like multivalued attribute, composite attribute  
 weak entity etc <sup>table 4</sup> represent कर रहे हैं।

Weak entity no rel table (क्या relation है या नहीं)  
 total generalization, partial, disjoint,  
 over superclass, subclass, partial participation.

Basic ques. <sup>subclass</sup> <sup>superclass</sup> <sup>subclass</sup> <sup>superclass</sup> <sup>subclass</sup> <sup>superclass</sup> <sup>subclass</sup> <sup>superclass</sup>  
 ER design, ER diagram, (ER Diag + schema table)  
 hospital, hfc management, university, school  
 related + few ques. (Design of schema + ER diag)  
 may be from exercise

Ch-3. Relational Algebra  
 \* view rel ques.  
 \* Proof. (CT conversion)  
 \* Natural join के बारे में  
 \* <sup>वे दो प्रकार के हैं</sup> <sup>एक है join</sup> <sup>दूसरा है join type</sup>

Basic Ques  
 Algebra

Ch-4 compulsory  
 \* SQL query upto subquery  
 \* 20 mk SQL + 10 mk other ques.  
 ch-2

No negr of  
 cursor,  
 procedure,  
 PL/SQL के  
 बारे में नहीं

Ch-6  
 \* 2 part है  
 \* Integrity & security  
 \* both (over exercise)  
 (over exam में)

ques mostly  
 from  
 ex.

exercise से होगा Ques (दिया है)



# Sec-B Ch-7 (Computing ques)

Q1 (must am)

Ch-7: exercise ques-

- 1/ Canonical cover. (সব কবর)
- 2/ extraneous attributes. (সব কবর)
- 3/ BCNF + class taught topic.
- 8/ 3NF, justification

read max from ch-7 since must ques.

comparison between BCNF & 3NF

dependency preservation etc etc.

Ch-12 (index) (full set)

- 1/ comparison properties, table, insert, deletion of B & B+ tree  
table মুখে লিখ  
table বো, তেজ নতুন
- 2/ Dynamic, Static, diff between value insert বো
- 3/ Btree, B+ tree, properties of B and B+ tree.  
Btree vs B+ tree  
Static hashing vs dynamic hashing
- 8/ Insertion and deletion, Table insert, delete & insert করে.
- 9/ Binary vs AVL tree indexing  
Dense vs Sparse  
Static Index vs Dynamic index

Ch-15 Transaction

- 1/ Serializability
- 2/ Conflict serializability
- 3/ Cascadelen
- 4/ Recoverable  
recoveryability  
accept error ২০, ২০ ৪ ২০ ৪, ৪২ ৪৪২ ৪৪
- 5/ view serializability  
cascading rollback সমস্যা সমাধান accept করতে হয়।

Ch-16: Concurrency Control

- 1/ True, (error error, error error) ২০৩.
- 2/ Timestamp protocol: validity based protocol, optimistic why?
- 3/ Validity check error error error error/ protocol
- 8/ True based protocol acyclic, error, so, dis adv for  
cascading rollback  
Thomson write rule.

22/23 min



\* view realizability via ques from exercise.  
 8/ Basic & operation / factor  
 (good & bad sides)

1/ Deadlock (wait for graph)  
 (answer can be given by graph)

9/ See exercise of the Book exercise  
 not enough. for answering the question

10/ Only discussed topic exercise.  
 11/ Recoverability  
 12/ complex math not req.

13/ solve last 3 yrs question (not 2012)  
 + exercise related to class topic.

14/ Only slide & book for work better follow  
 book, exercise.

15/ CT & MD may be repeated.

16/ If you solve last 3 yr ques. + related  
 exercise.

CT-4 Ques.

Tree based protocol  
no dead lock

17/ slide & book only ch-12 & 13.  
 + handout

18/ Live & dead ques related.

19/ Tree based protocol & recovery & cascades  
 related to?



\* Tree based approach or Timestamp protocol.

\*  $process_i$   $\rightarrow$   $local\_time_i$   $\rightarrow$   $process_j$   $\rightarrow$   $remote\_time_j$

\*  $process_i$   $\rightarrow$   $local\_time_i$   $\rightarrow$   $process_j$   $\rightarrow$   $remote\_time_j$   $\rightarrow$  Timestamp  
which  $local\_time_i$   $<$   $remote\_time_j$   $\rightarrow$   $process_i$   $\rightarrow$   $process_j$

\* Dead Lock prevention

write flag

victim process select writer