

Ques:- The Motor Vehicle Branch administers driving tests and issues driver's licenses. Any person who wants a driver's license must first a learner's exam at any motor vehicle branch in the province. If he/she fails the exam, he can take the exam again anytime after a week of the failed Exam date, at any branch. If he passes the exam, he is issued a ~~license~~ license (type = learner's) with the unique licence no. A learner's license may contain a single restriction on it. The person may take driver's exam at any branch any time before the licence's expire date (which is usually set at six months after the license issue date). If he pass the exam, branch issue him a driver's license. A driver's license must also ~~record~~ record if the driver has completed driver's education, for insurance purpose.

Create an E-R diagram following three steps.

1) Find out the entities in the spec.

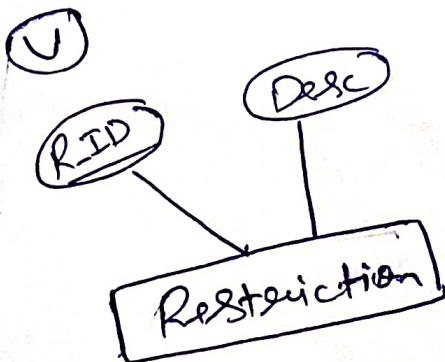
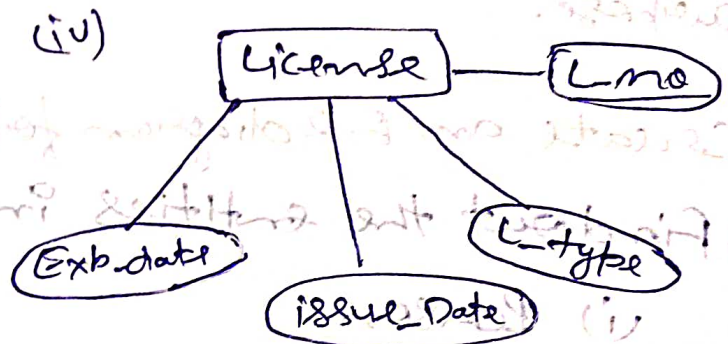
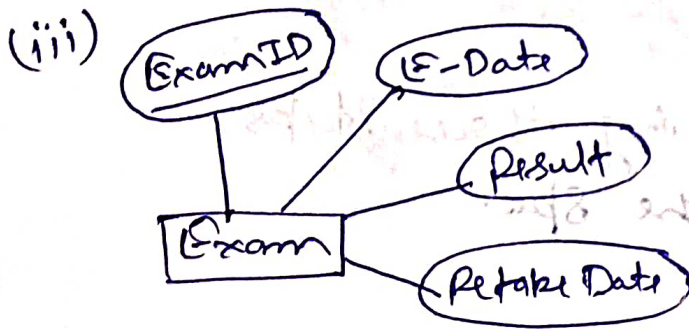
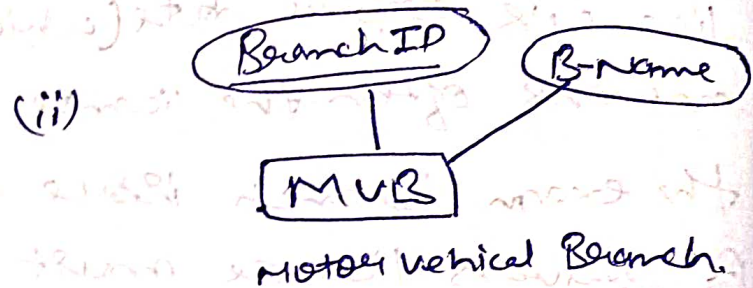
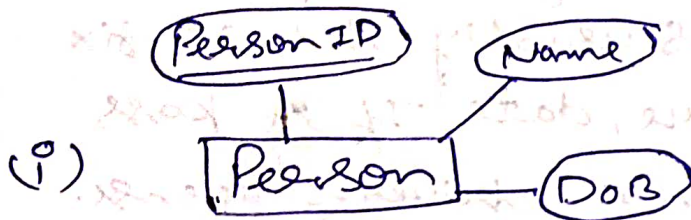
- (i) Person
- (ii) Motor vehical branch
- (iii) License
- (iv) Learner's Exam
- (v) Learner's Exam
- (vi) Registration or Restriction.

2) Find out relationship among the entities.

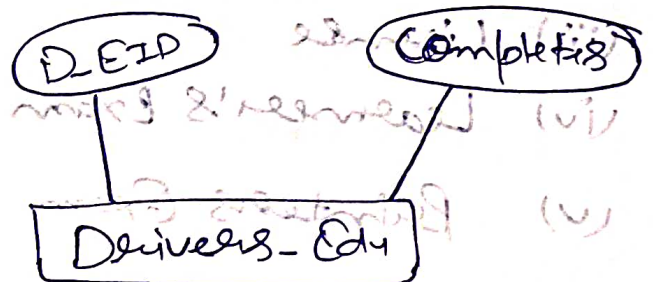
- (i) Person - takes Exam
- (ii) Motor vehicle branch - Administers Exam
- (iii) Person - holds license.
- (iv) License - has - restrictions
- (v) Person - completes - drivers Education.

③ Attributes of the entities.

④ ~~is~~ considering how entities and relation-ship.

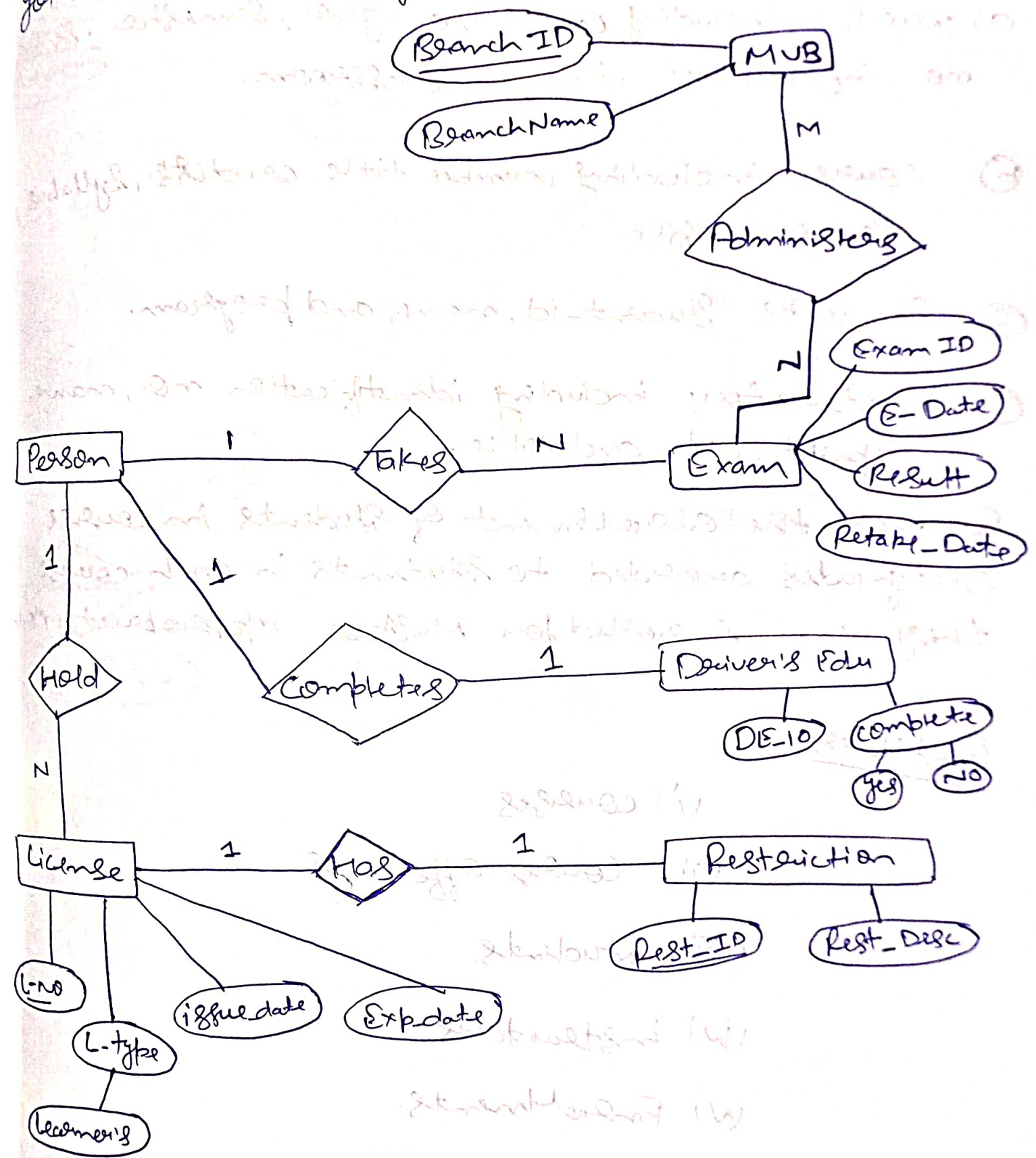


(vi)



Entities are frames distinguished by their attributes.

After combining these entities with relationship, we get complete E-R diagram.



Ques 2 A University Registrar's Office maintains data about the following entities.

a) courses, including, course no., year, semester, section no., instructor, timing, classroom.

b) Course, including number, title, credits, syllabus, pre-requisite.

c) Students, student-id, name, and program.

d) Instructor; including identification no., name, department and title.

Further, the enrollment of students in course and grades awarded to students in each course they are enrolled for must be appropriately recorded.

Entities

(i) courses

(ii) course offerings

(iii) Students.

(iv) instructors

(v) Enrollments.

