Task-1 : conceeputal design ER model he-

alth and system :-

Aim :- To verify conceptual design ER model health & system.

Tools required :- https://draw io [or] creatly (ERD plus) steps. Lable Subnum; Involved in creating ER diagram.

step-I :- problem understanding and requirements

Analysis.   3 30

~~step-I~~
→ understand the domain! Hospitals patients

doctors : Appointments, participitation.

step-2 :- Identify major entites are use Compann-ds representing objects of concepts in the system
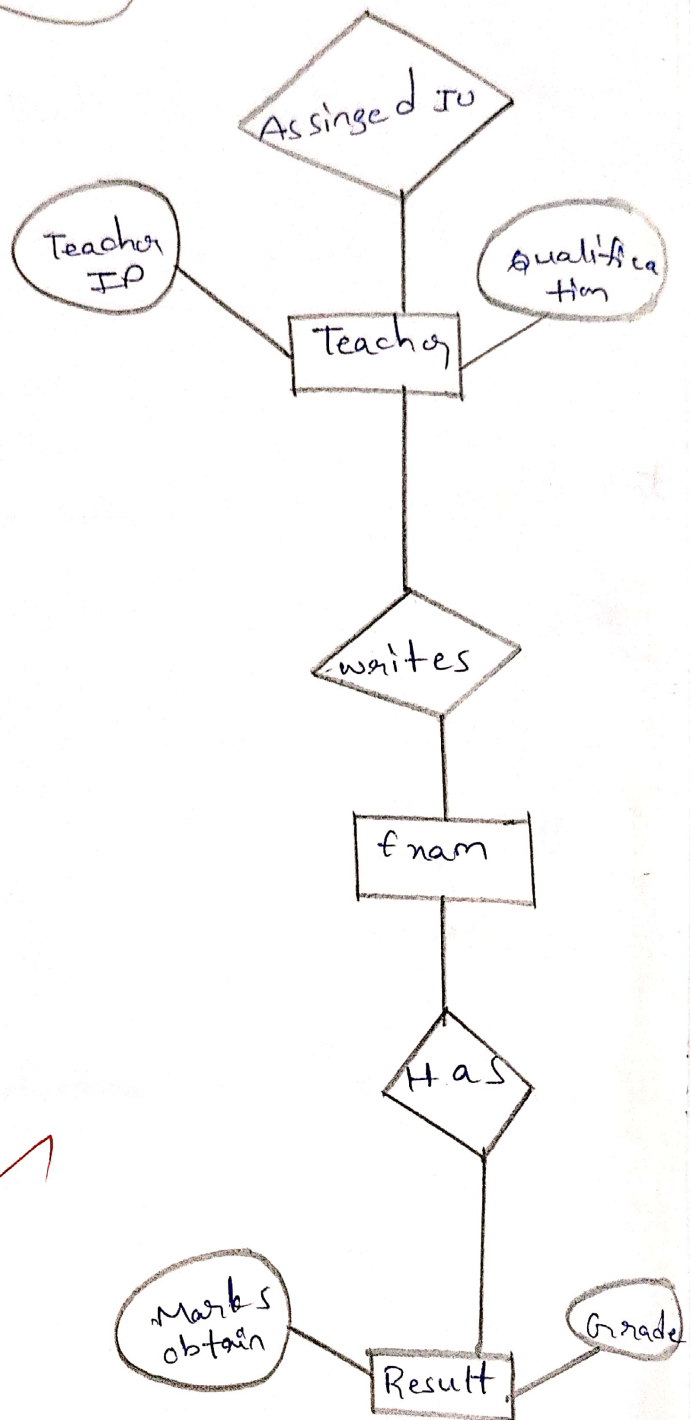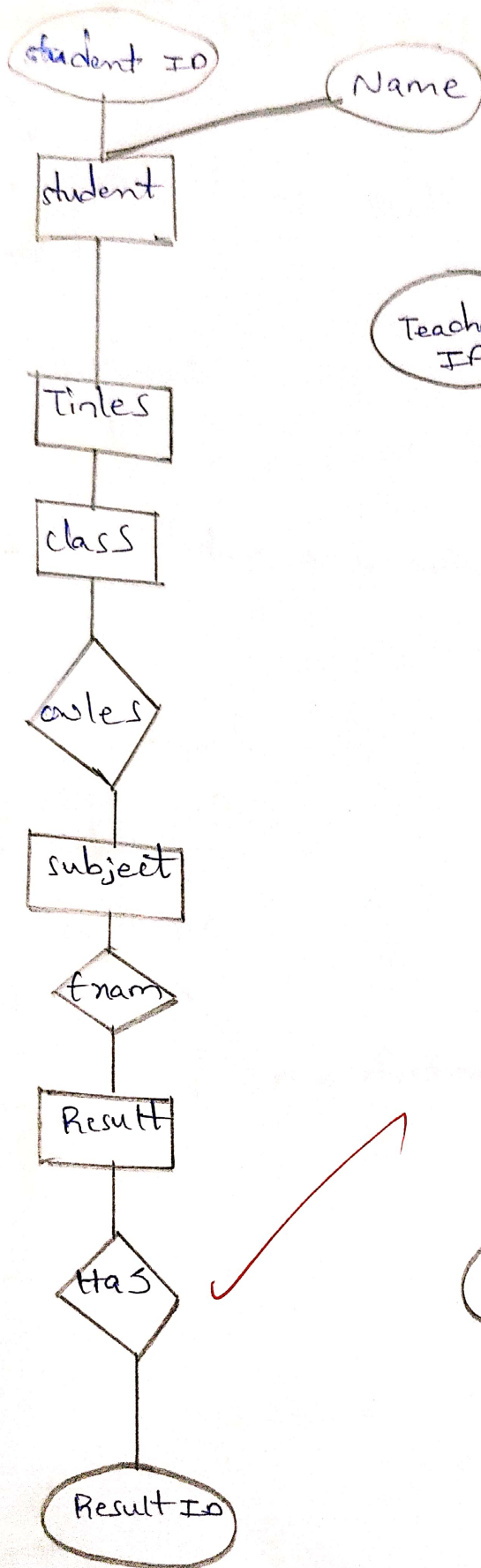
→ patient
→ Doctr
→ Appointment
→ prescription
→ Medicine
→ department

step-3 :- Identify Attributes for each existing exa-mple attributes.

Entity attributes:

Student ID

Name

student

Tinles

class

coules

subject

f nam

Result

Has

Result ID

Assinged TU

Teacher ID

Qualifica tion

Teachor

writes

f nam

Has

Marks obtain

Result

Grade

Patient :- Patient ID (Pk); Name, age, phone,
number, Adress.

Doctor :- Doctor (Pk); Name; speclization, Contact
No, Department. ID (fk).

Appoitment :- precription ID (pk); Appoitment (fk);
diagnosis, Notes.

Medicines :- Medicines ID (pk); Name, posax, di.

Department :- department ID (pt) Name, location

step-4 :- define relationships between entities.

→ A patient books one (or) more appointments.
→ A doctor conducts gumantes one precription.
→ A doctor belongs to one department

step-5 :- draw ER diagram using io.

Instruction :
      open https :///: draw .i/o

choose blank diagram ——→ click crack.
from /left panel drag the following.

→ use rectangles for entites (patient, doctor)

→ use rectangles for entities (Name, Age etc).

→ use diamonds for relationships (Books).

connect using lines.

solid lies for relationships connections use pk

→ use ellipse for multivalued attributes.

→ use labels such as (1:N) ; (M:N) ; etc!

to show cardinalities;

Example relationships :-

Patient (1) — books → (m) Appointment

doctor (1) — conducts → (m) Appointment

Appointment (e) — includes → (m) medicine

Save diagram as PNC / pdf and Include it any

your lab report.

Input for the ER design :-

real time health care systems, domains uses

· requirements database design results

(entity → Assignt) , relationship , Identification)

output :-

entity :- relationship diagram (ER) ,

All Identified entities with attributes

All relationships with appointment coot relint
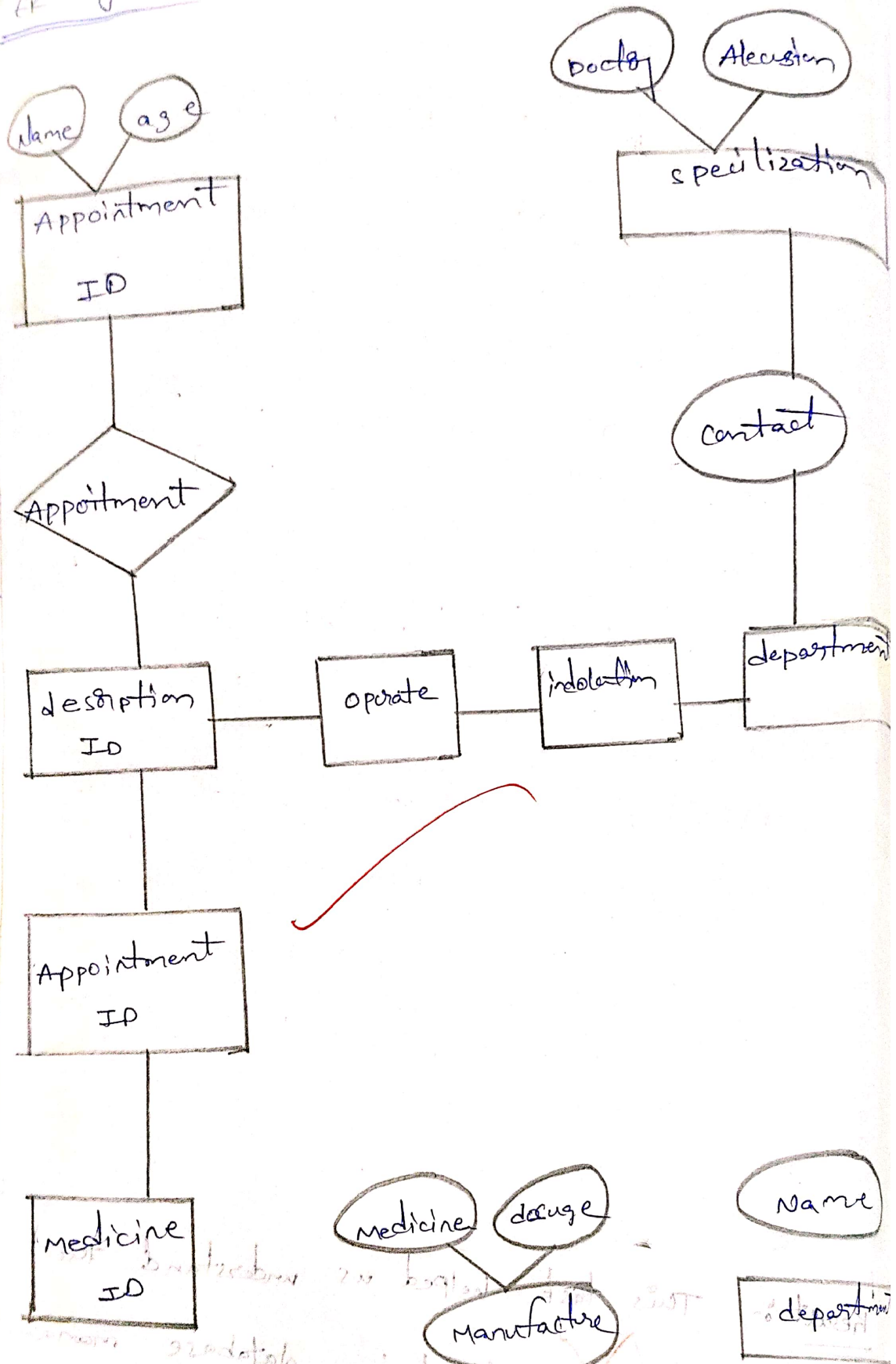
All keys and keys marked appropriately.

*) All Identified entities with attributes

*) All relationships with appointment reliant

*) All key and keys marked opportunity

28/7 Result :- This task helped us understand the importance of conceptual design in data base management using draw up able to model a test-time healthcare system into a ek-diagram which form foundation for relational schema design in the test phase

Name   age

Appointment
ID

Appoitment

description
ID

Appointment
ID

Medicine
ID

Doctor   Alecsian

specilization

Contact

Operate   indolation   department

Medicine   dosuge
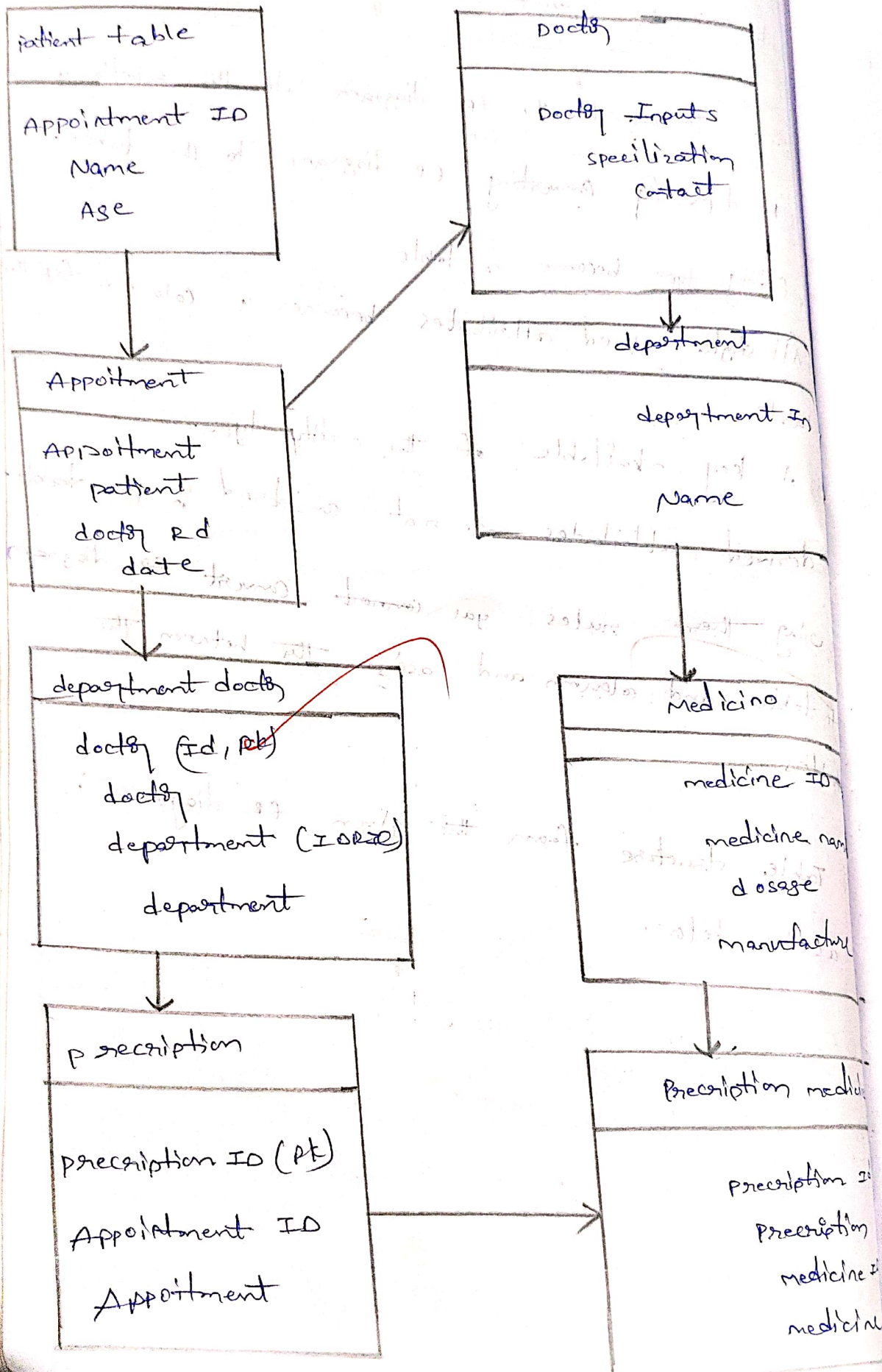
Manufacture

Name

department

28/7/25

Task-I:2 :- Convert ER diagram into relational model

Aim :- To convert the ER diagram into the relational model steps for converting ER diagram to the table.

* Entity type become a table

* All single valued attributes becomes a column for the table

* A key available of the entity type.

* derived attributes are not considered in the table

* using these rules you connot convert ER diagram to table and column and assign the between the tables

* Table structure from the given ER diagram is as in below.

Scanned with OKEN Scanner

Relational model :-

patient table

Appointment ID
Name
Age

Appointment

Appointment
patient
doctor R d
date

department doctor

doctor (Id, Pk)
doctor
department (Id Rd)
department

prescription

prescription ID (Pk)
Appointment ID
Appointment

Doctor

Doctor Inputs
specilization
Contact

department

department In
Name

Medicine

medicine ID
medicine nam
dosage
manufactur

Prescription medici

Prescription I
Prescription
medicine i
medicine

Result :- the
ER diagram

Result :- The relations all model for the given ER diagram was sucessfully completed.

VEL TECH - CSE	
EX NO.	1, 2
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	2
RECORD (5)	—
TOTAL (20)	12
SIGN WITH DATE	28|7