

a) i. Hardware - input device - keyboard, mouse
barcode reader.

Scanner.

output device - monitor
~~software~~ Printer.

processing device - CPU

Server

Storage device - Hard disk drive

RAM

Software - instructions for equipments.

pharmacy software

System Software.

Stored data - medicine data

chemists' data

prescriptions data

personal - chemist

procedures - Scan and read prescription

payment procedures.

ii. end-users

direct users - chemist

indirect users - patients

Date:/...../.....

- iii. increased productivity
better information
improved service
competitive advantage.

b)

i. IoT (Internet of Things) Systems.

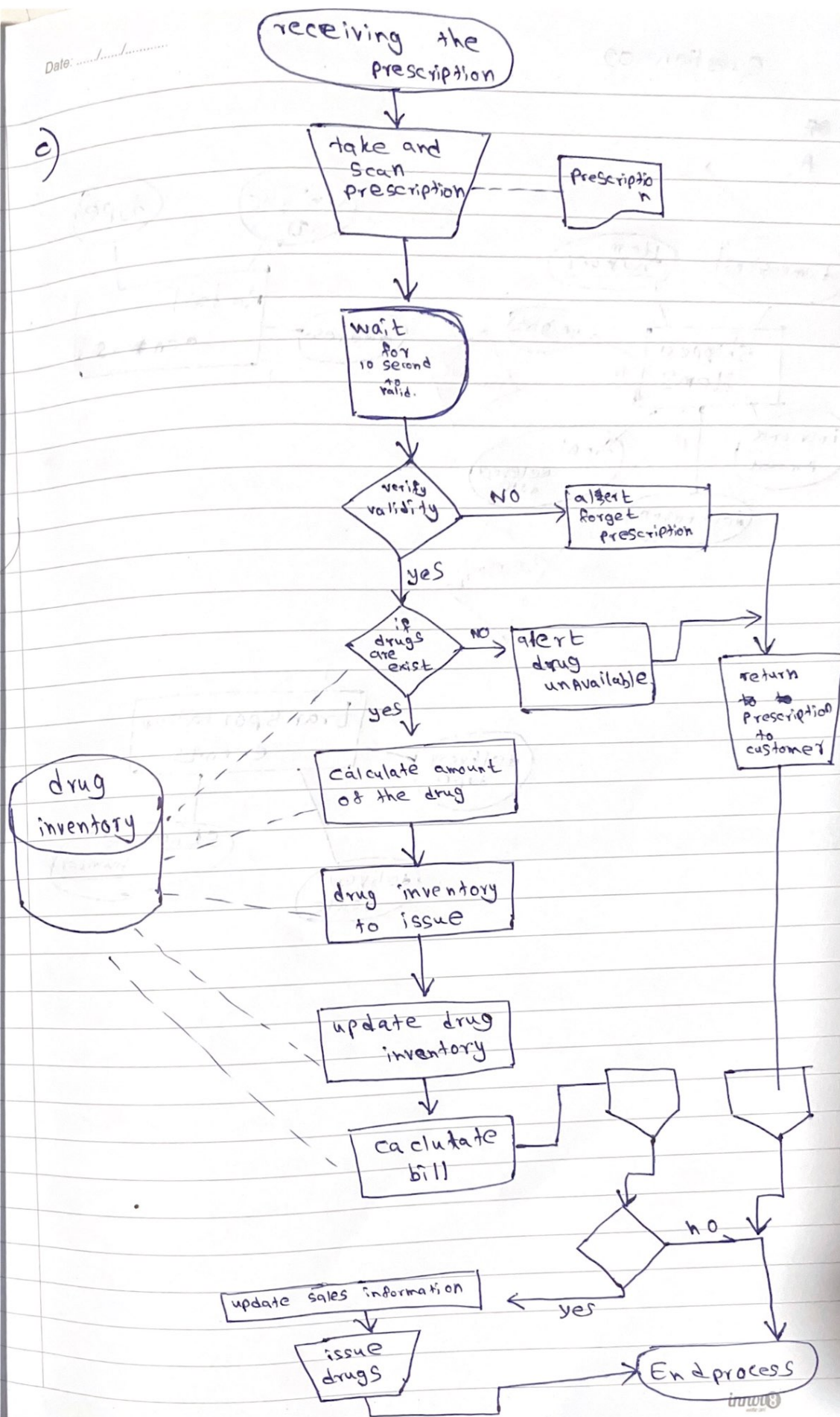
- ii. The internet of things (IoT) is a network of objects each embedded with sensors things, which are connected to the internet.

This concept is connecting any device with an on and off switch to the internet.

This includes everything from mobiles, air conditioners, headphones ~~was~~ wearable devices and almost anything.

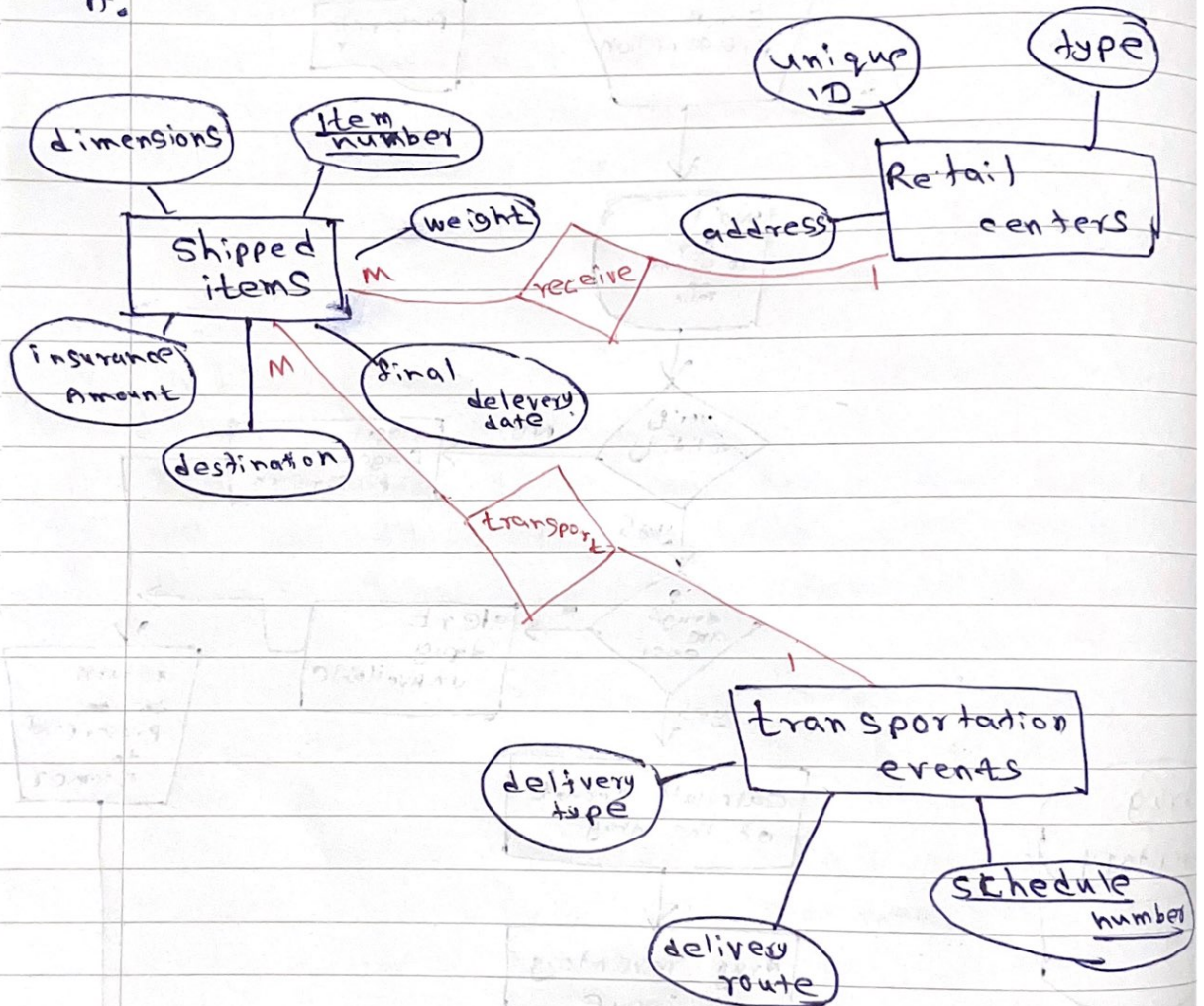
Date:

c)



Date: / / Question 02

Q.
A.



3.

lot (lotNumber, cost-of-materials, createDate)

productionUnit (Serial-#, lotNum, ProductType, exactWeight, productDesc, qualityTest)

RawMaterials (Material-ID, type, unitCost)

created Form (lotNumber, material-ID, units)

Question 3

A)

PLAYER (player-no, player-name, Team, Team-color, player-position, Team-captain)

F1 is in 1NF because there is no any repeating groups. and in 2NF because there is no partial dependency and not in 3NF because there is transitive dependency

[player-no, player-name, Team, player-position]

(Team, Team-color, Team-captain)

Date:/...../.....

Part B

a. SELECT S.name

FROM Supplier S, Catalog C, Part P

WHERE S.sid = C.sid and C.pid = P.pid

AND P.Color = 'red'

b. SELECT S.SID

FROM Supplier S, Catalog C, Part P

WHERE S.sid = C.sid and C.pid = P.pid

AND P.Color = 'red'

AND P.Color = 'green'

Question 4

1. SELECT mov-title
FROM Movie
WHERE mov-released-date < "2015"
2. SELECT A.act-fname, A.act-lname, MC.role
FROM Actor A, MovieCast MC, Movie M
WHERE A.act-id = MC.act-id AND M.mov-id = MC.mov-id
AND M.mov-title = 'Annie Hall'
ORDER BY A.act-fname ASC
3. SELECT M.mov-title, M.mov-released-date, R.num-of-
Rating,
FROM Rating R, Movie M M.mov-released-
Country.
WHERE R.num-of-ratings = (SELECT max(num-of-rating)
FROM Rating
)
4. SELECT M.mov-title, M.mov-released-date, count(c.act-
id)
FROM Movie M, MovieCast C as 'number
of
acts'
~~WHERE~~
WHERE C.mov-id = M.mov-id AND
mov-language = 'English'
GROUP BY M.mov-title, M.mov-released-date