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ID

14619

Subject (paper)

Software Engg

Program

BSCSE - 4

Section

'A'

Paper

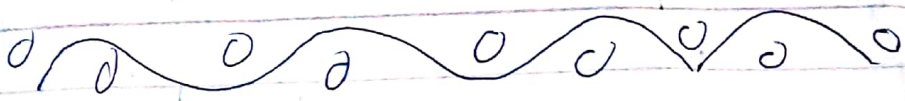
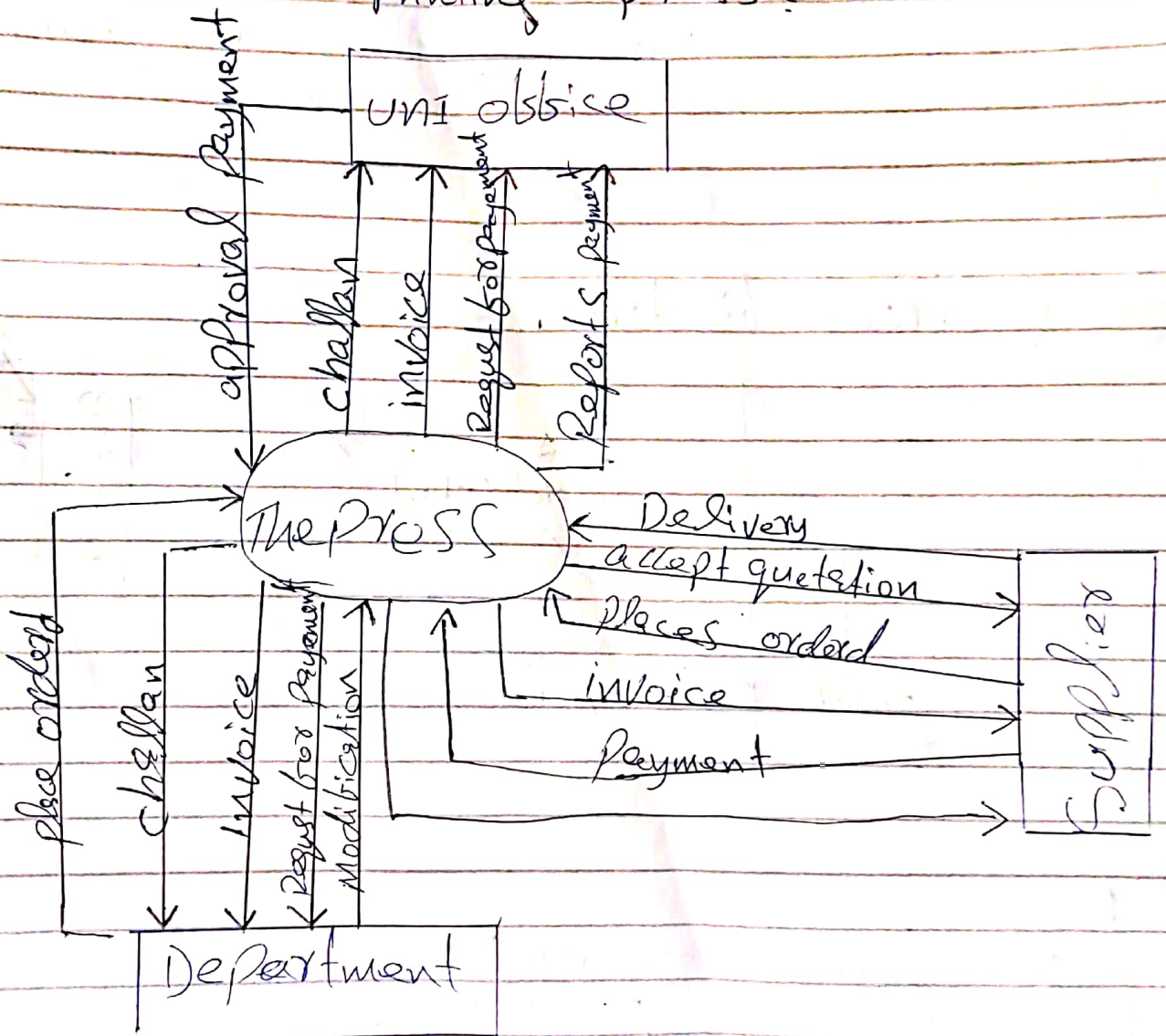
Final Term

Date

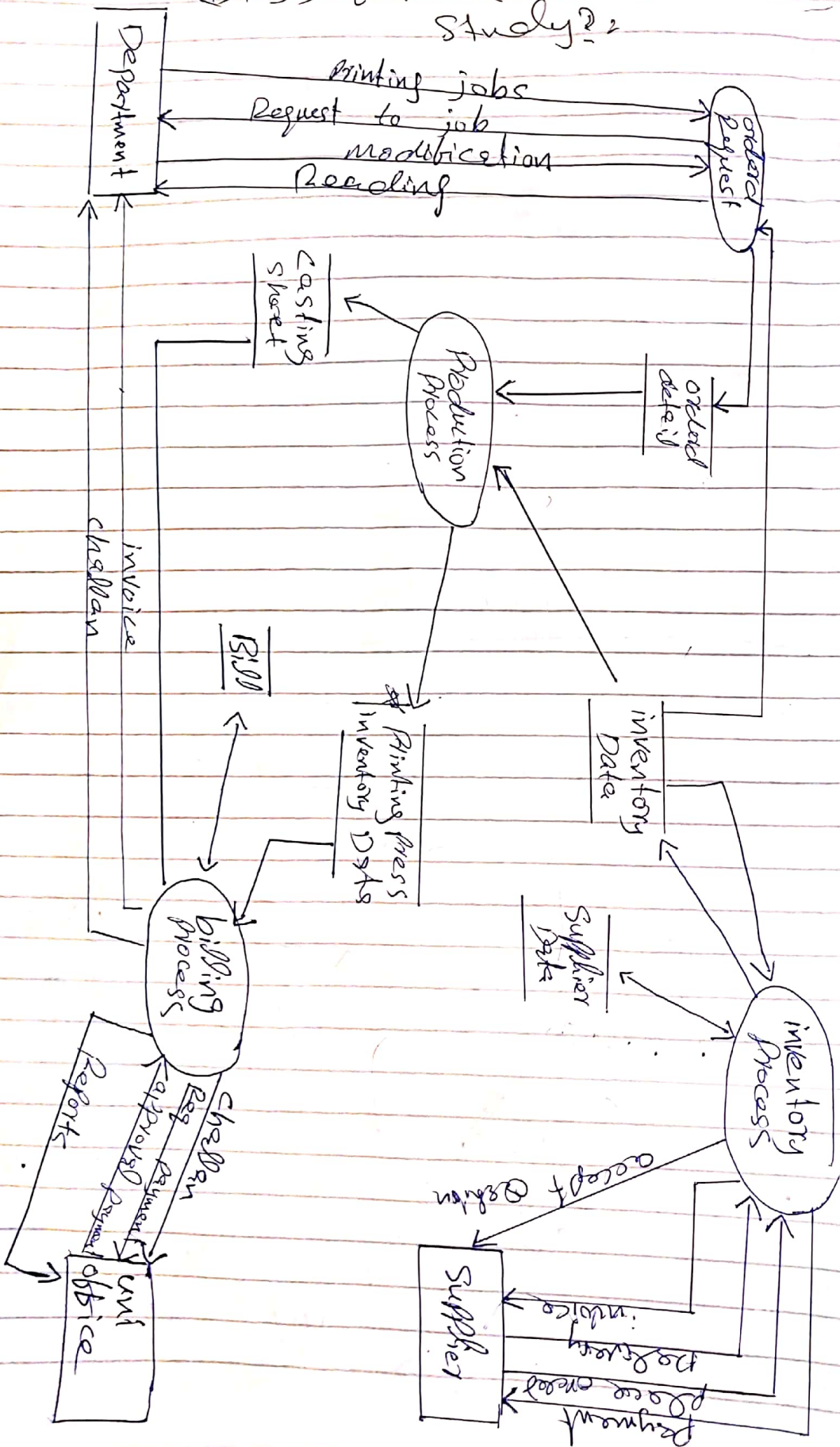
22-06-20

Q1.1

Draw a Context diagram for INU Printing Press?



Q1.7: Draw a level 1 Data Flow Diagram (DFD) for the above Case Study?



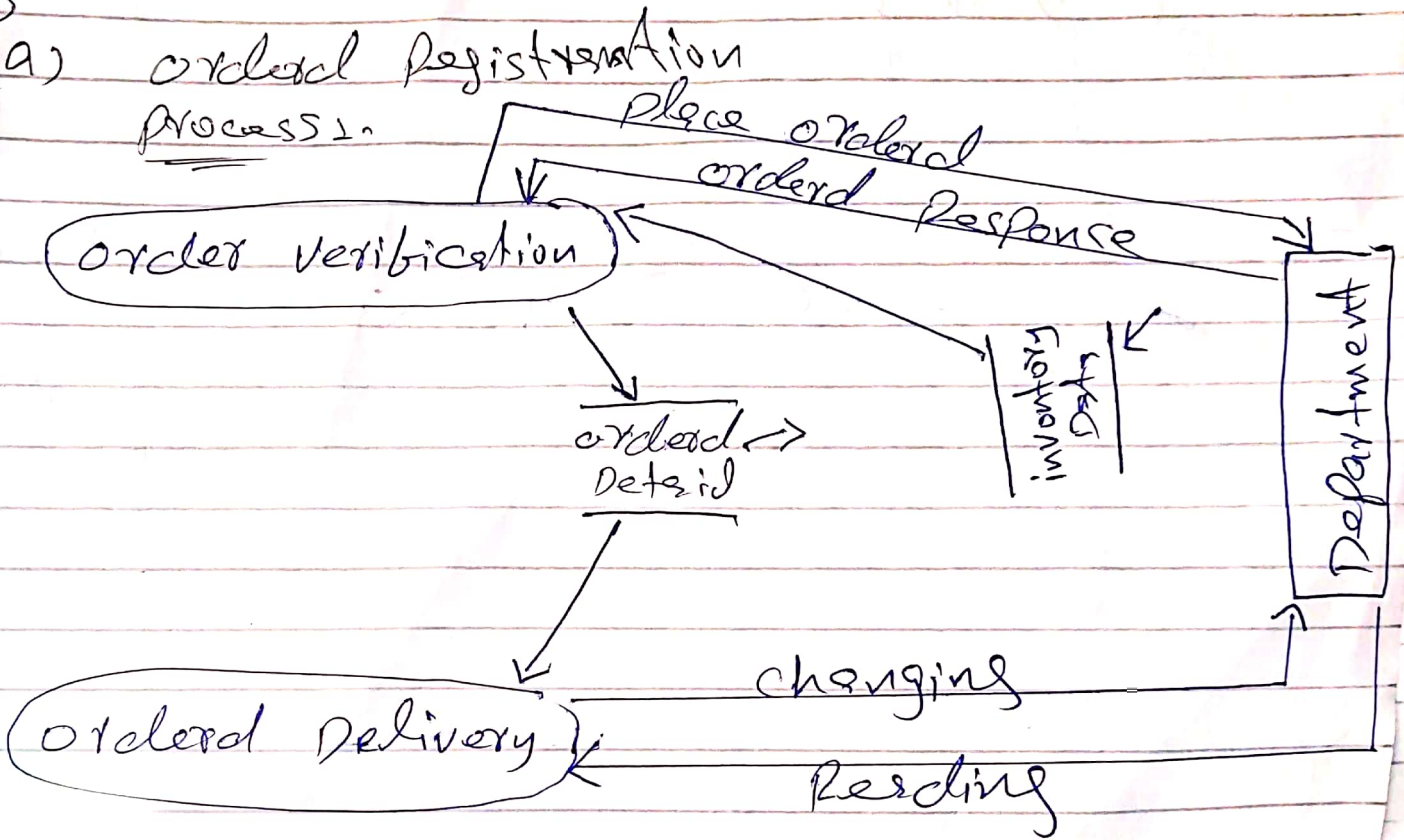
Q 1.32

Draw a level 2 (DFD) for the order registration process, press production process, inventory process, and Billing process?



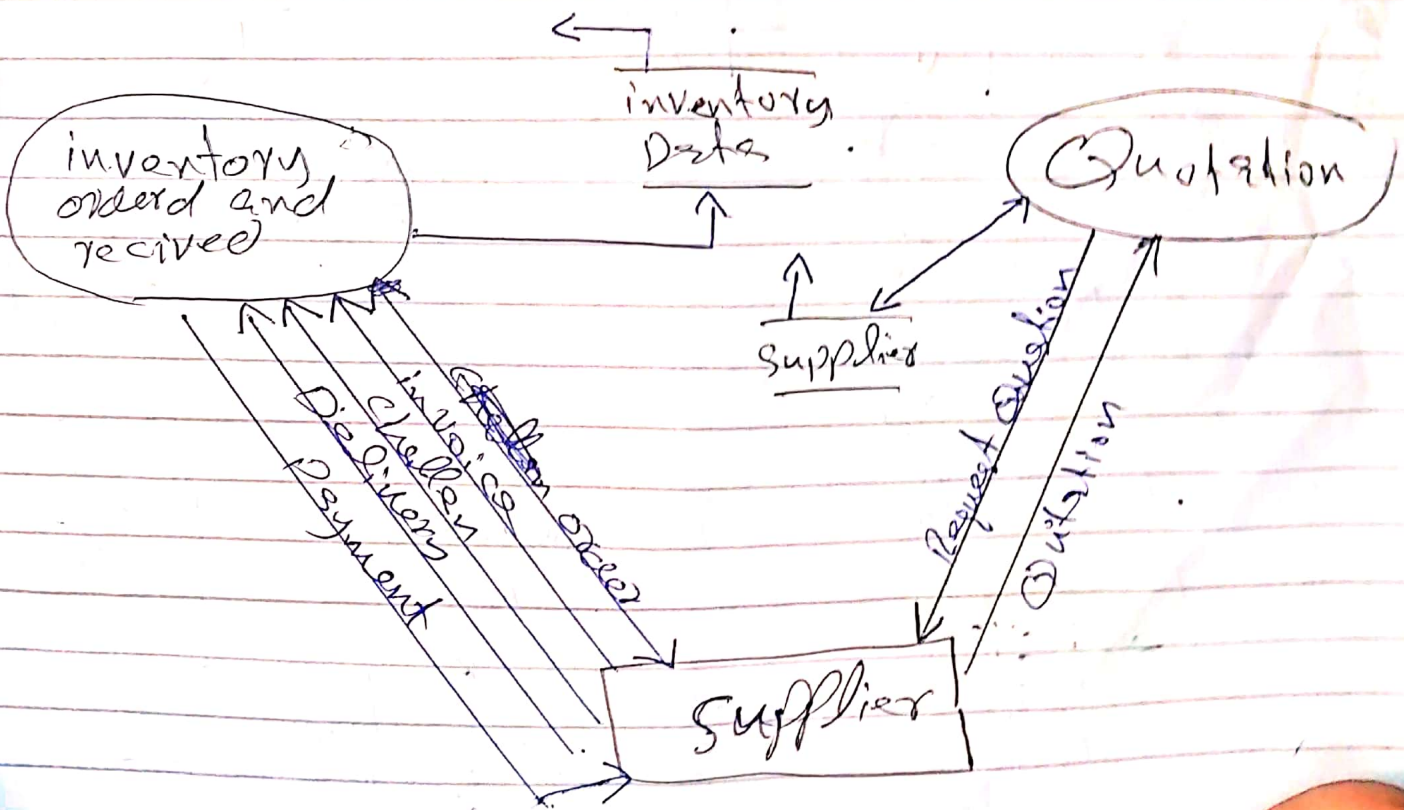
Q1.3

(a) order registration process

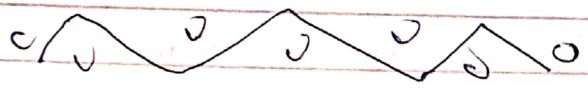
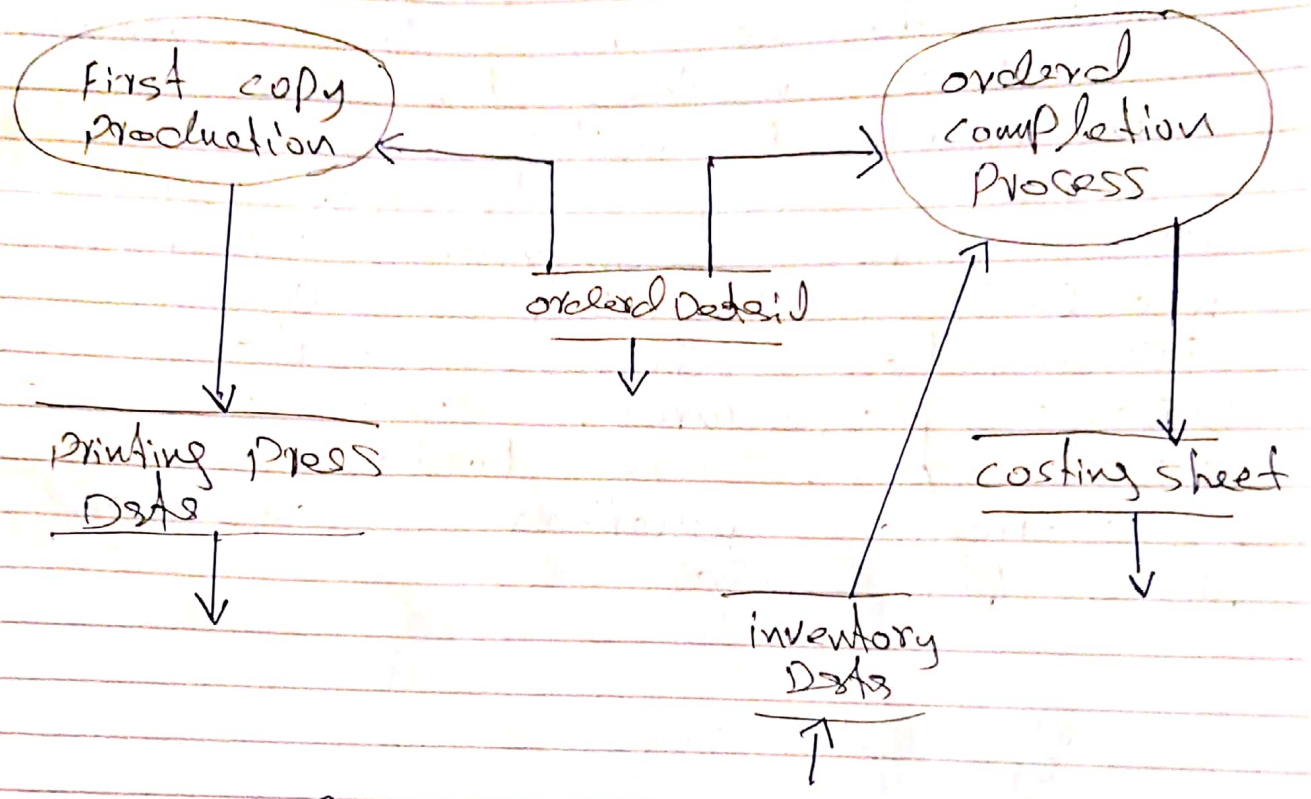


Q 1.32-

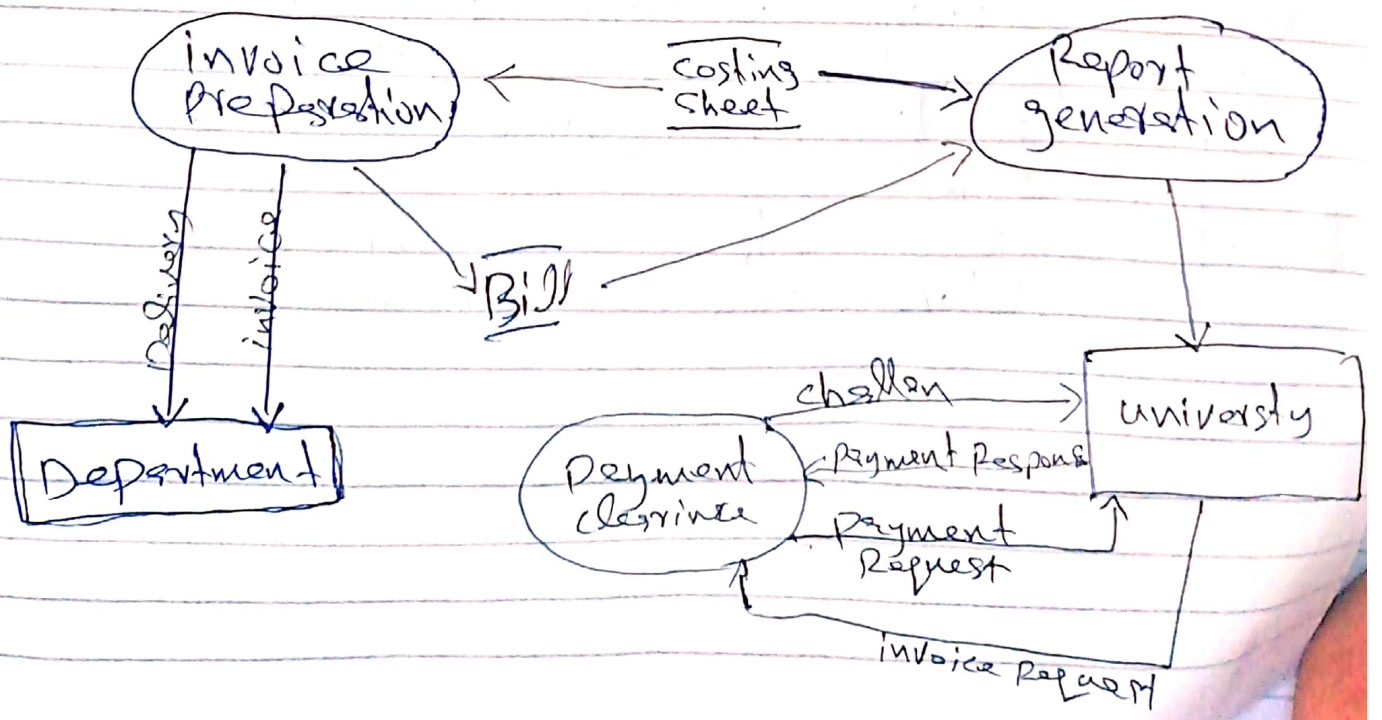
# Inventory Process



### Q1.3 Press Production



### Q1.3.2 Billing Process





Q 2.1: Explain why testing can only detect the presence of errors, not their absence.

Ans:

- \* The goal of software testing is to observe the software behavior to meet its requirement expectation.
- \* Testing is a set of activities where the tester try to make the software behave ~~and~~ anomalous in order to detect a defect or anomaly to be later fix.
- \* Testing is a part of broader process of software verification and validation. it consist of a set of activities, where the tester try to make the software behave anomalous in order to detect or anomaly to be later fix.



Q.1

Unit Testing.

In Computer programming, unit testing is a software testing method by which individual units of source code, sets of one or more computer program modules together with associated control data, usage procedures, and operating procedures, are tested to determine whether they are fit for use.

2) System testing.

System testing is a level of testing that validates the complete and fully integrated software product. The purpose of system testing is to evaluate the end-to-end system, specifications, usually the software is only one element of larger computer-based system.

## Black Box testing:

- \* Black box testing is the software testing method which is used to test the software without ~~knowing~~ knowing the internal structure of code of program.
- \* This type of testing is carried out by testers.
- \* Programming knowledge is not required to carry out Black Box testing.

## White Box Testing:

White box testing involves the testing of the software code for the following

- \* internal security holes.
- \* Broken or poorly structured paths in the coding processes.
- \* the flow of specification through the code
- \* Expected output.
- \* testing of each statement, object and function on an individual



Q 3.1

## Type of Software maintenance

1) ~~Fault repairs~~ & Creative maintenance.

### Solution

Corrective maintenance is a maintenance task performed to identify, isolate and rectify a fault so that the failed equipment, machine or system can be restored to an operational condition within the tolerances or limits established for in-service operation.



## 2.1) Adaptive maintenance:

adaptive maintenance is the implementation of changes in a part of the system w/c has been effected by a change that occurred in some other part of the system. w/c has been effected by a change that occurred in some other part of the system. modification of software product perform after delivery to keep a software product usable in a changed or changing environment.

## 3) Perfective maintenance:

perfective maintenance mainly deals with implementing new or changed user requirement. perfective maintenance involves making functional enhancement to the system. performance even when the changes have not been suggested by faults.

Q 2.2

Business process re-engineering  
(BPR).

is a business management strategy, originally pioneered in the ~~very~~ early 1980s, focusing on the ~~pioneered~~ analysis and design of workflow and business processes within an organization.

BPR aimed to help organizations fundamentally rethink,

BPR seeks to help companies radically restructure their organization by focusing on the ground-up design of their business processes.

According to early BPR proponents, Business process reengineering is also known as business process redesign, business transformation or business process change management.



