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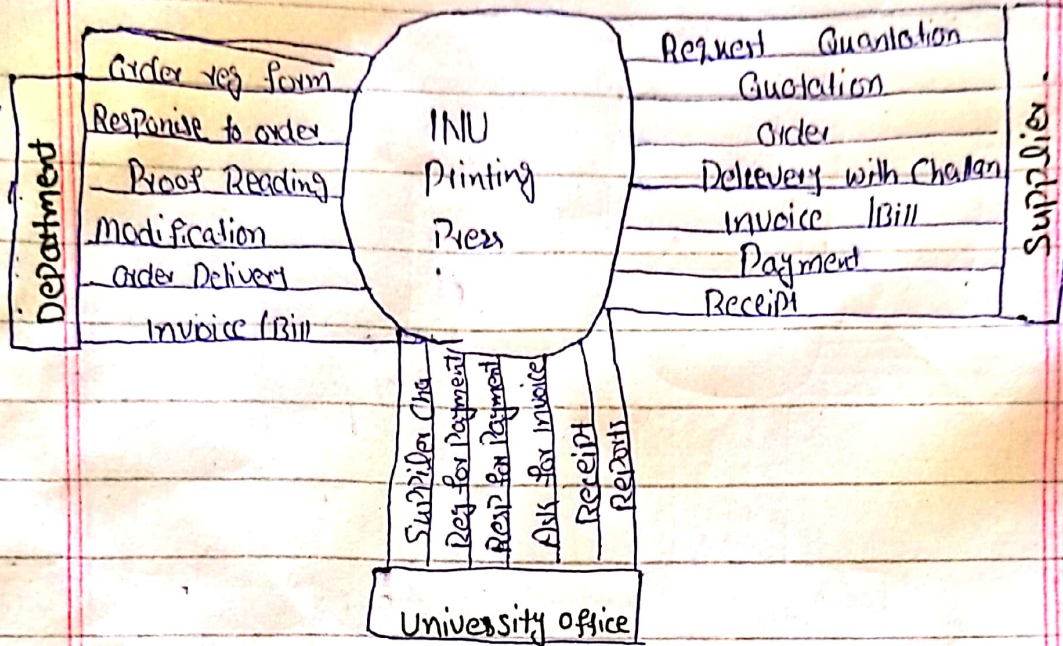
COURSE TITLE Software Engineering

PROGRAM - BS (SE) Software engineering

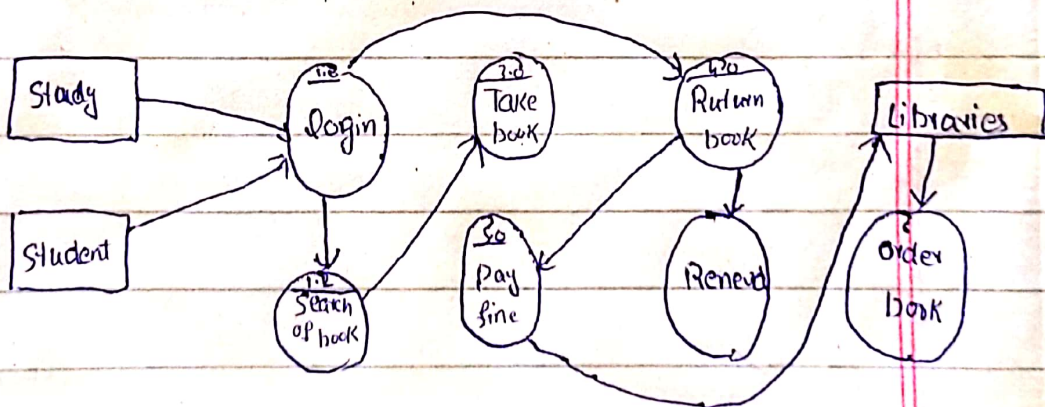
SEMESTER: 4th

Question No 1

Q.1.1 =

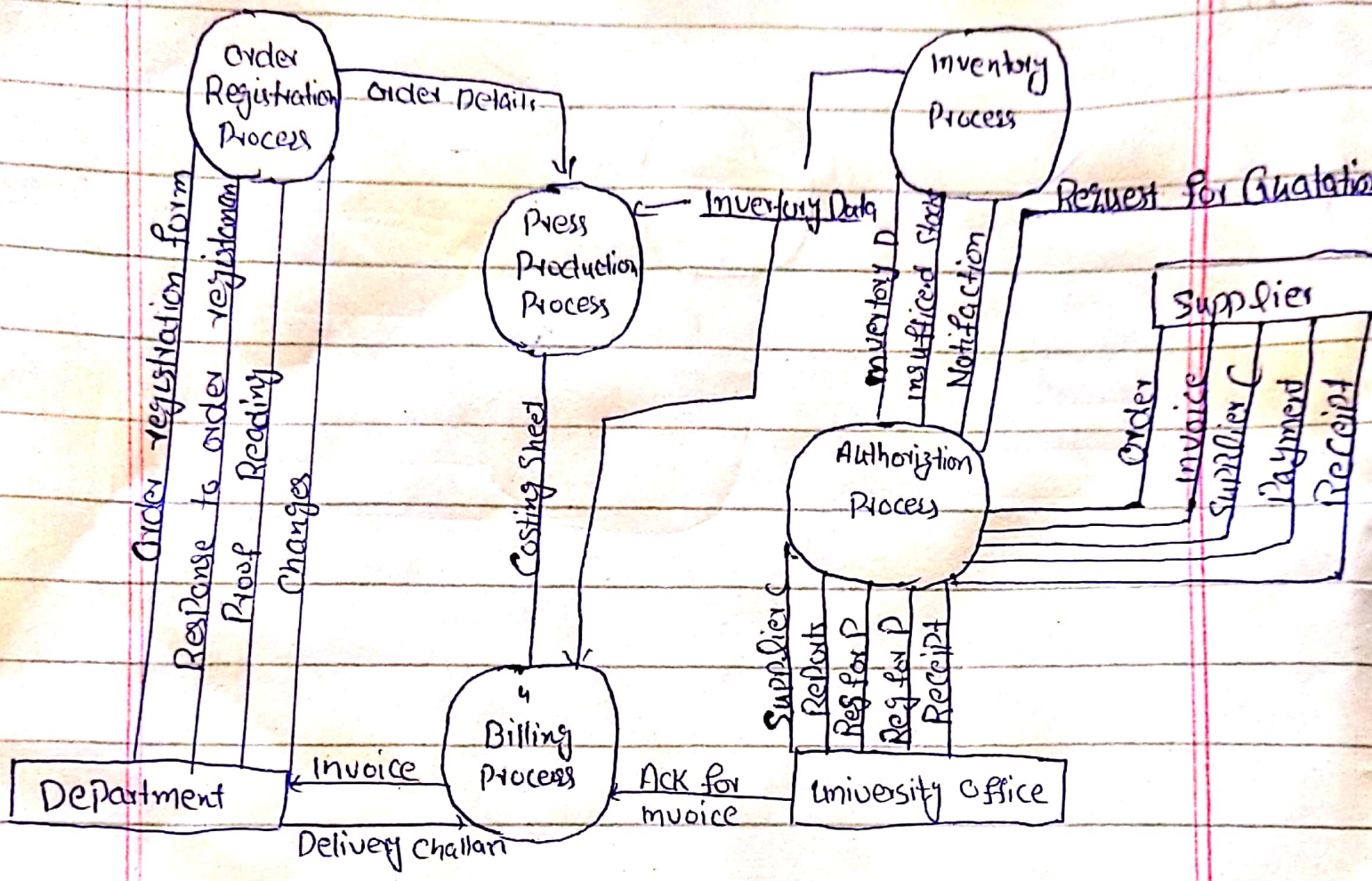


Q.1.2



2

Q1.3.



(3)

Question 2:

Q2.1 Explain why testing can only detect the presence of error not their absence.

Ans: The testing is a set of activities that aim to detect software anomalies. Error can be discovered and corrected.

The goal of software testing is to observe if the software behavior meets the requirement that they are expected to meet.

The testing developer software fulfills requirements the way to find behaviors in an incorrect undesirable difference from specifications.

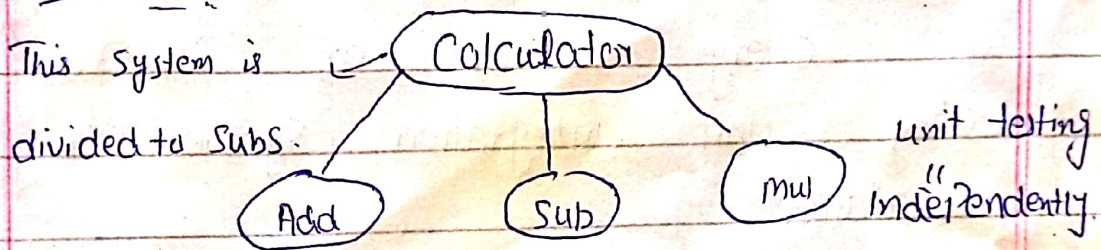
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Q.2.2 Define the following terms:-

Unit Testing: "The unit testing is mainly focuses on the smallest element of software design modules".

⇒ It make heavy use of white box testing

For examples. calculator on of Product



System Testing:

The system testing is the system as a whole is tested to uncover requirement errors.

⇒ The system testing verifies that all system element work properly and that over all system function and performance has been achieved or not.

(5)

Black box testing-

⇒ It is a method of software testing that examines the functionality of an application without looking into its internal structures or working.

⇒ This method is applied at every level of software testing unit integration, system & acceptance.

⇒ Test are based on requirement and functionality.

⇒ It is carried out to test functionality of the program also called as behavioral testing.

(6)

White box testing :-

The white box testing is based on an analysis of the internal structure of components of system.

→ white box testing also known as clear box testing.

They can be applied all level of SDLC.

→ Most of the defects are found in unit component & integration level is through white box.

(7)

Question 3

Q 3.1 Briefly describe the three main types of Software maintenance why is it sometimes difficult to distinguish b/w them ?

Ans: Any work done to change Software after it is in operation is considered to be maintenance work.

the main types of Software maintenance.

(i) CORRECTIVE MAINTENANCE.

when defects found in the Software from the feedback of Customer, defects any kind of Coding, design, logic error appropriate actions are taken to rectify the correct functionality of the Software System.

(8)

ADAPTIVE MAINTENANCE :

Modifying the Software to match Change in ever

Changing environment

environment Changing any outside factors : Platform,

Changes : Govt Policies , business rules .

PREVENTIVE MAINTENANCE :

making the Program easier

to understand in

this helps us in future

maintance work

e.g Optimization , documentation

update

Q 3.2:

Ans: Reorganising and modifying existing Software System to make them more maintainable

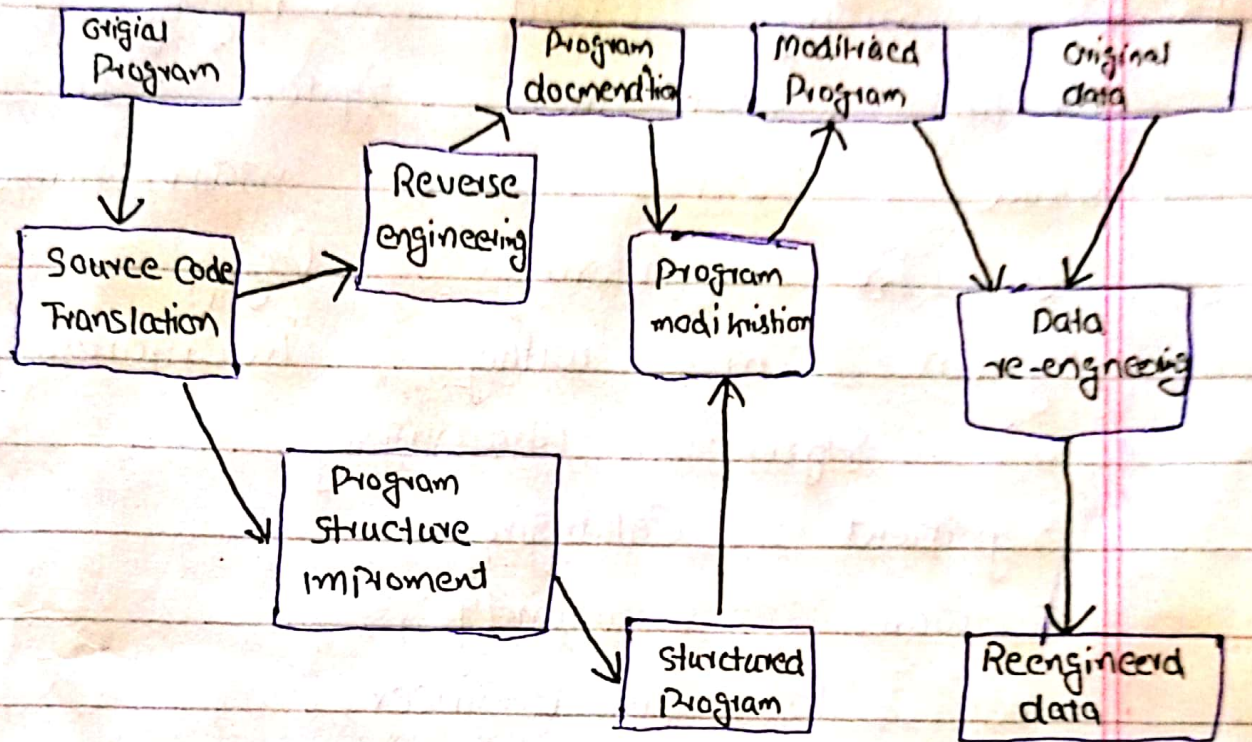
The Re-engineering Legacy System in withly Reorganising to significant Challenging Significant Challenging to Software Community when to Re-engineer -

when it has bussiness value but is expensive to maintain a when System Change are mostly Confined to Part of the Large System

Business Process Re-engineering. Business Process re-engineering is Concerned with redesigning business Process to reduce the number of redun dant activities and improve Process efficiency.

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Re-engineering Process Diagram



The End