Experiment NO: 5 Date: 29-10-21

Aim:-

Develop time-line chart and project table using PERT or CPM project scheduling methods

Procedure:-

A PERT diagram has the following construction rules

1, Each task or activity is represented as a node in boxes

2, Arrows show the dependencies between tasks or activities

3, There is a start node, which has only an outgoing arrow and an end node which has only incoming arrows

Earliest start Time (TES) & Earliest finish time (TEF)

start node TES=0 TEF=0 & TLS=0 (latest start time) TLF=0 (latest finish time)

Requirement specification TES=0 TEF=4 & TLS=0 TLF=4

SRS document TES=4 TEF=10 & TLS=4 TLF=10

System design TES=10 TEF=26 & TLS=10 TLF=26

Input design TES = 26 TEF = 30 & TLS = 37 TLF = 41

Database design TES = 26 TEF = 41 & TLS = 26 TLF = 41

Back up design TES = 26 TEF = 40 & TLS = 33 TLF = 47

Output design TES = 41 TEI = 47 & TLS = 41 TLF = 47

Coding TES = 47 TEF = 52 & TLS = 47 TLF = 52

Unit testing TES = 52 TEF = 56 & TLS = 52 TLF = 56

Integration testing TES = 56 TEF = 59 & TLS = 56 TLF = 59

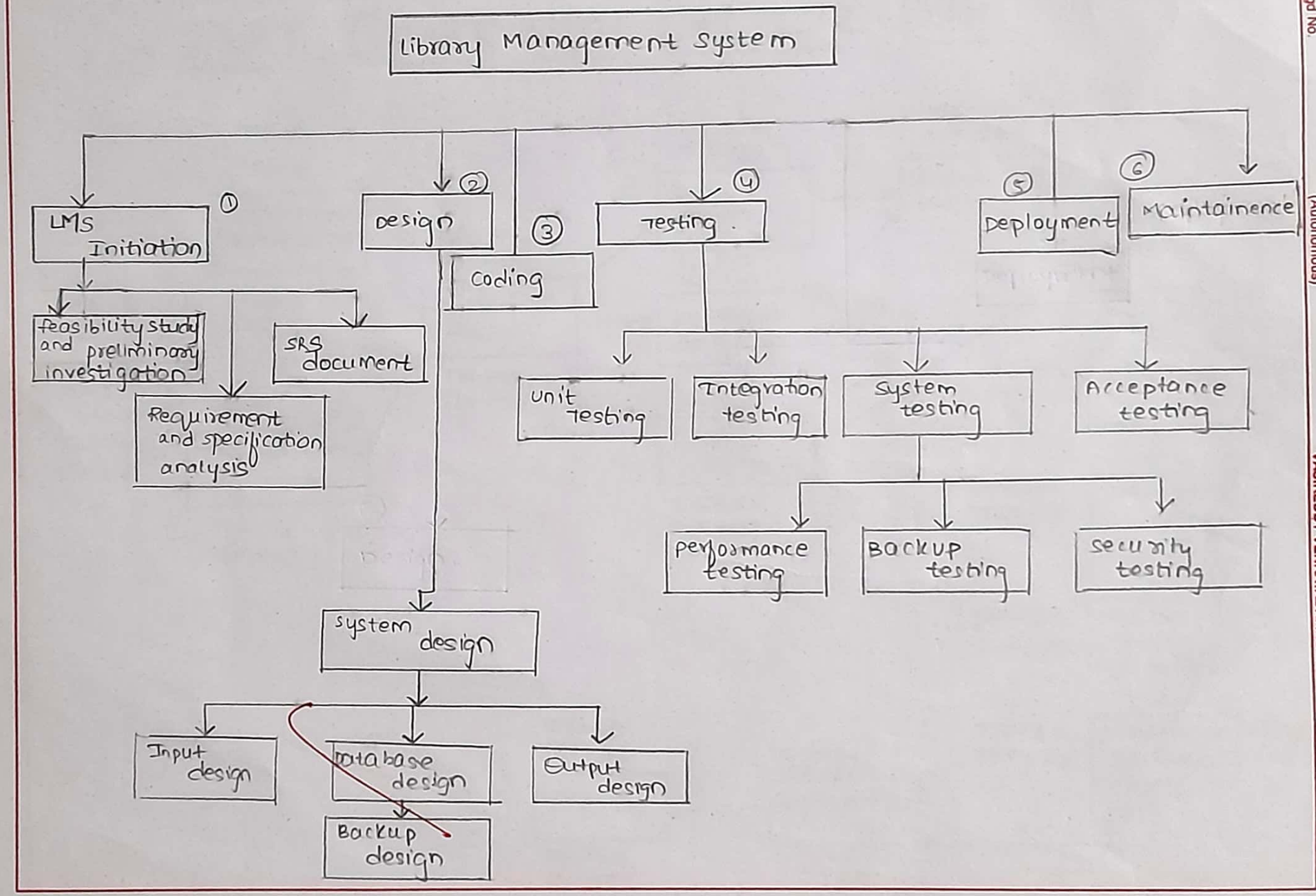
System testing TES = 59 TEF = 62 & TLS = 59 TLF = 52

Acceptance testing TES = 62 TEF = 64 & TLS = 62 TLF = 64

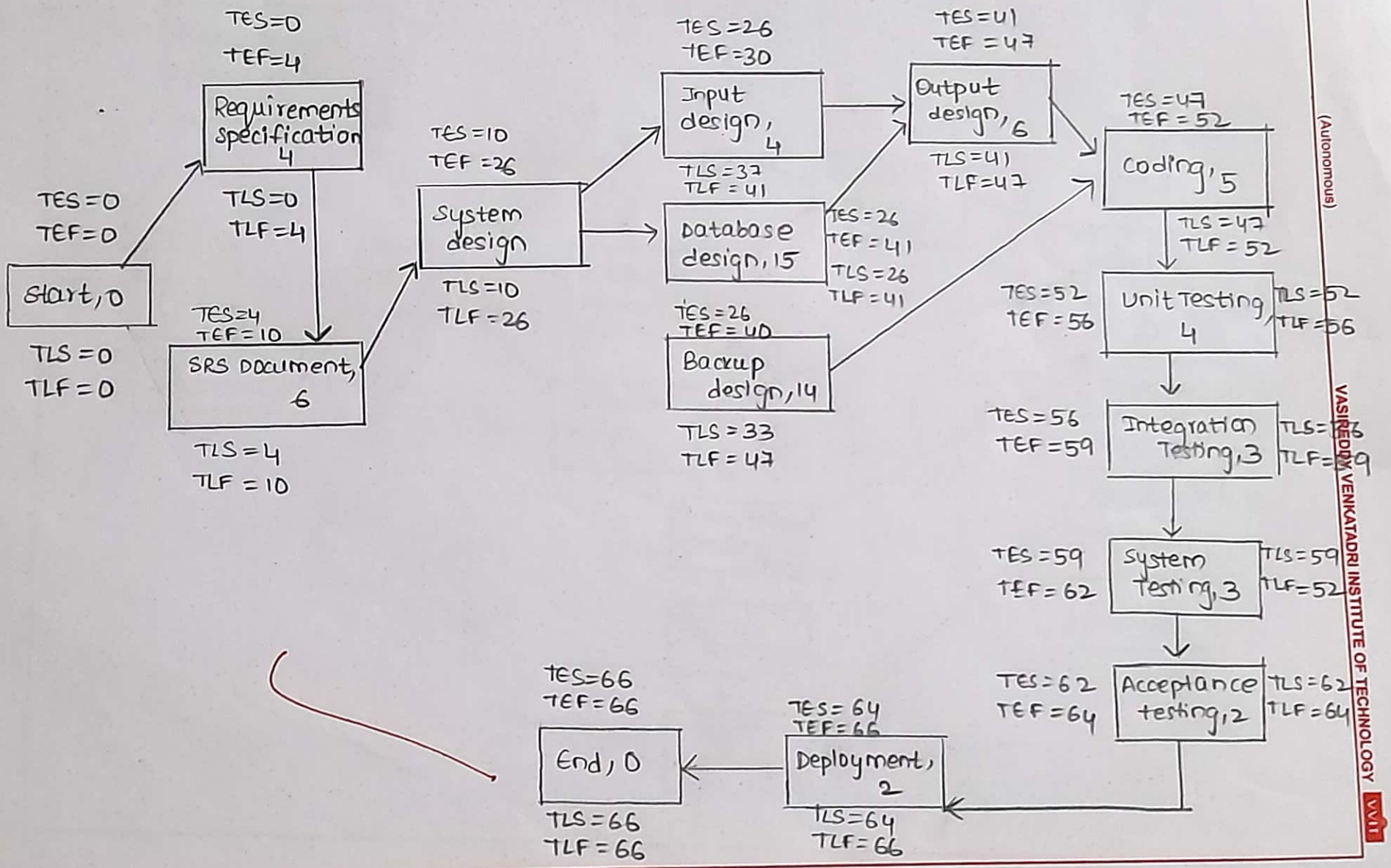
Deployment TES = 64 TEF = 66 & TLS = 64 TLF = 66

End node TES = 66 TEF = 66 & TLS = 66 TLF = 66

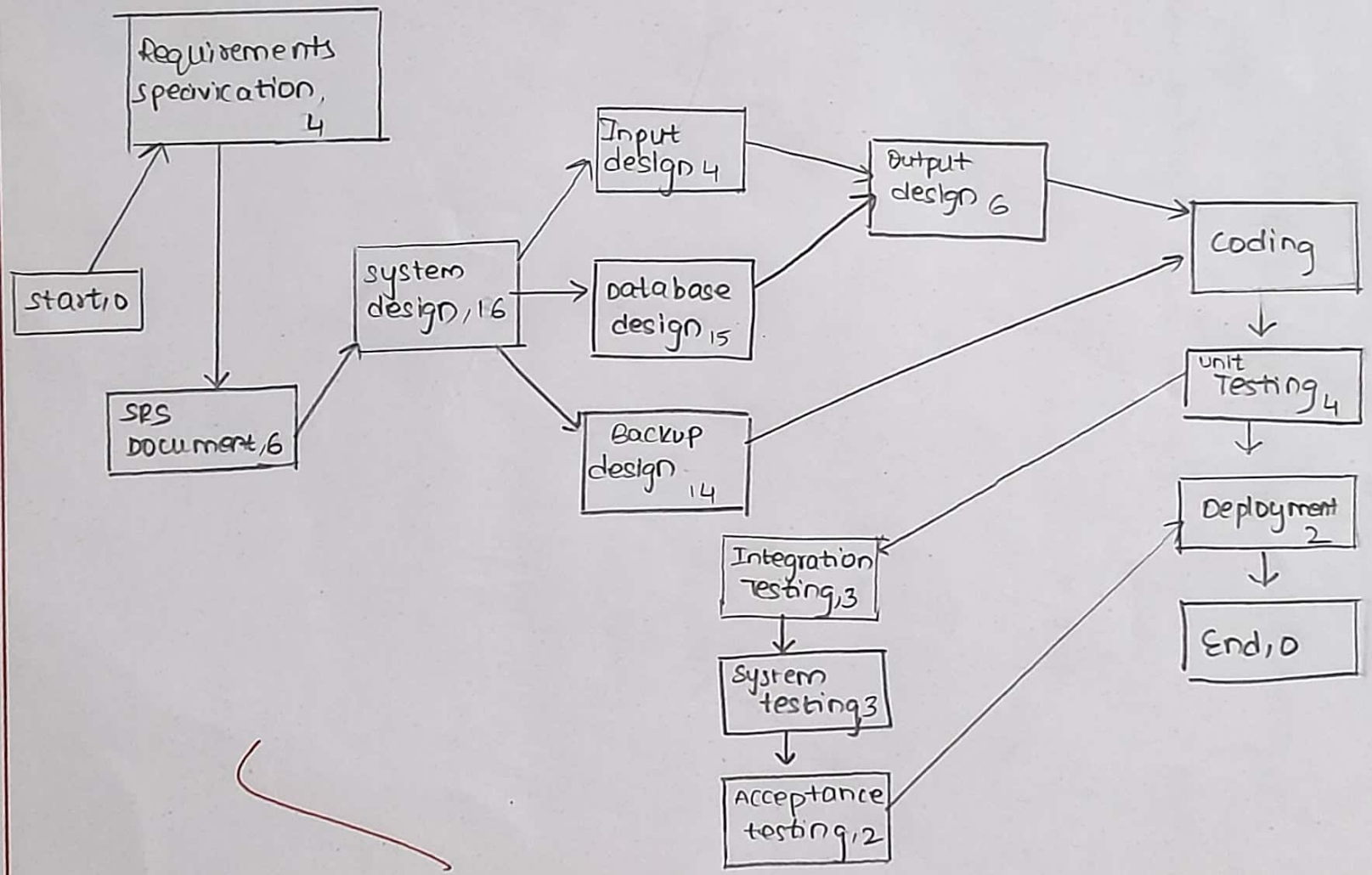
WORK BREAKDOWN STRUCTURE (WBS)



PERT CHART WITH CRITICAL PATH



Activity Network Diagram:-



FAQ's

1. Why is PERT used?
2. What is the difference between CPM and PERT?
3. What is the purpose of a Work break down structure?
4. What are the limitations of PERT?
5. How can we use PERT to complete the project on time?