

UNIT I INTRODUCTION

Organizing Reuse – Introduction – Motivation for Reuse – *Framework for Reuse-Evolution of Reuse - Reuse in industry* – Managing a reuse project – *Software Reuse Products- Software Reuse Processes and paradigms* – Reuse tools.

UNIT II REUSE MANAGEMENT 9

Managing a repository – The REBOOT component model – Classification – Configuration management of the repository – Managerial aspects of software Reuse– Software Reuse Metrics – Software Reuse Cost estimation – Forming a reuse Strategy – Assessing reuse maturity.

UNIT III REUSABLE COMPONENTS 9

Practicing reuse – Reuse Techniques- Generic reuse development processes – Develop for reuse – Testing reusable components – Object oriented components – Object oriented development for reuse – Reuse Techniques- Reuse Technologies- Detailed design for reuse – Implementation for reuse – Verification, test and validation.

UNIT IV REUSE PHASES 9

Development with reuse – with reuse specific activities – Common reuse processes – Phases of development with reuse – Impact of reuse on development cycle- Reuse Technologies.

UNIT V CLEANROOM SOFTWARE ENGINEERING 9

Re-engineering for reuse – Methodology – Retrieving objects in non-object oriented code–Measurements – Tools support for re-engineering – Overview of clean room software engineering – Phases in clean room method – Box structures algorithms – Adapting the box structures.

TOTAL = 45

REFERENCES:

1. Wayne C.Lim, “ Managing Software Reuse”, Prentice Hall, 2004.
2. Hafehd Mili , Ali Mili, Sherif Yacoub, “Reuse based Software Engineering: Techniques, Organizations and Controls”, John Wiley and Sons, 2002.
3. Karma Mcclure, "Software Reuse Techniques – Additional Reuse To The Systems Development Process ", Prentice Hall, 1997.
4. Even-Andre Karisson, "Software Reuse – A Holistic Approach", John Wiley And Sons, 1996.