AMSW05 SOFTWARE ARCHITECTURE

UNIT-1 INTRODUCTION

1.1 Software Architecture- Architecture Structures and Views
1.2 Importance of Software Architecture- Predicting System Quality
1.3 Influencing Organizational Structure- Improving Cost and Schedule estimates
1.4 Context of Software architecture.

UNIT-2 QUALITY ATTRIBUTES

2.1 Understanding quality attributes- availability- interoperability- modifiability
2.2 Performance and security- testability- usability- quality attribute modeling and analysis.

UNIT-3 ARCHITECTURE IN THE LIFE CYCLE

3.1 Architecture in the agile projects- Architecture and requirements
3.2 Designing and documentation- Implementation and testing
3.3 Architecture reconstruction and conformance.

UNIT-4 ARCHITECTURE AND BUSINESS

4.1 Economic analysis of Architecture- Architecture competence
4.2 Architecture and Software product lines- Case Studies.

UNIT-5 ARCHITECTURE IN ADVANCE

5.1 Architecture in Cloud - Cloud Definition- Service Model
5.2 Economic Justification- Base Mechanism- Architecture for the Edge
5.3 Edge Document system- SDLC- Metropolis Model.

References Books:

1. Taylor R. N, Medvidovic N, Dashofy E. M, "Software Architecture: Foundations, Theory, and Practice", Wiley, 2009.
2. Booch G, Rumbaugh J, Jacobson I, "The Unified Modeling Language User Guide", Addison-Wesley, 1999.