

13. FINANCIAL ENGINEERING

UNIT I: Introduction – Scope – Financial Engineering Team, Productizing the solution
Financial Engineering Versus Financial Analysis – Factors contributing to the growth of
Financial Engineering – Knowledge Base Of Financial Engineer.

UNIT II: Conceptual Tools of the Financial Engineer – Value relationships and applications
Measuring return, risk – Understanding interest rates and exchange rates.

UNIT III: Physical tools of the Financial Engineer – Product Development – Models – Design
Testing – Designing Futures and Forwards – Swaps – Options – Its types – Fixed income
securities.

UNIT IV: Financial Engineering Process and Strategies – Evolution of ALM (Asset – Liability
Management), Hedging – Building Block Approach.

Arbitrage and Synthetic Instruments.

UNIT V: Future Trends – Impact of Globalisation – Recent Advances in settlement and clearing
– Legal Projections for Innovative Financial Products and Services.

References:

John F. Marshall & Vipul K. Bansal *Financial Engineering – A complete guide to Financial
Innovation*, Prentice Hall India.