

A complete web enabled Education Administration Software

Sr. No.	Topic Name
1	Software Crisis, Software Processes & Characteristics
2	Software life cycle models, Waterfall, Prototype
3	Evolutionary and Spiral Models
4	Requirement engineering
5	Use case approach,
6	requirements analysis using DFD
7	Data dictionaries
8	E R diagram
9	Cohesion & Coupling
10	What is software testing and why it is so hard
11	Error, Fault, Failure, Incident
12	Test Cases, Testing Process
13	Limitations of Testing
14	Unit Testing, Levels of Testing
15	Integration Testing, System Testing
16	Debugging, Domain Testing.
17	Path testing, DD-Paths
18	Cyclomatic Complexity, Graph Metric
19	Data Flow Testing, Mutation testing,
20	Grey Box Testing- types – Integration
21	System-Acceptance-Top-down-bottom up testing approach.
22	Boundary value analysis
23	Equivalence class testing
24	Decision table-based testing
25	Cause effect graphing technique.
26	Static Testing Tools
27	Dynamic Testing Tools
28	Characteristics of Modern Tools – Automated testing tools

Sr. No.	Topic Name
29	Management of Maintenance, Maintenance Process,
30	Maintenance Models
31	Reverse Engineering, Software Re-engineering
32	Configuration Management, Documentation.
33	Software Quality, Software Control, Quality Assurance, Quality Assurance Analyst, Quality Factor, Quality Management
34	Methods of Quality Management, Core components of Quality, Cost Aspect of Quality.
35	Quality Planning, Quality plan objectives, planning process overview
36	Business Plan and Quality Plan, TQM (Total Quality Management), TQM concepts, Zero defect movement
37	Quality Models/Standards
38	Standards and guidelines, Types of Models, ISO Standards
39	CMM and CMMI, Six Sigma concepts, Quality Challenge, National Quality Awards
40	The advances and the latest trends
41	latest applications of the areas
42	latest papers published in IEEE transactions and ACM transactions
43	latest papers published in IEEE transactions and ACM transactions,
44	Case studies, Discussion on some of the latest products available
45	Revision