Software Engineering	
SOURCE: 01	**Software Engineering (GATE EXAM)**
01	Software Engineering Syllabus Discussion
02	What is Software Engineering and Its Evolution with Examples
03	SDLC Life Cycle for Beginners with Real Life Example
04	Classic Waterfall Model
05	Iterative Waterfall Model with Example
06	V Shaped Model with Examples (SDLC)
07	Prototyping Model
08	Incremental Model
09	Evolutionary Model with Real Life Examples
10	Spiral Model (SDLC)
11	Agile in Software Engineering
12	SCRUM Model in Software Engineering | Agile Technology
13	Comparison of All SDLC Models | Waterfall, Iterative, Prototype, Spiral, RAD, Agile
14	Software Requirements Engineering | Feasibility Study | Elicitation, SRS, Validation
15	Functional vs Non-Functional Requirements
16	Software Requirements Specification (SRS)
17	User Requirements with Real Life Examples | User Requirement Specification
18	What is DFD | How to Design DFD Symbols Examples Full Explanation
19	Levels of DFD | 0-Level | 1-Level | 2-Level with Example
20	Logical vs Physical DFD with Example
21	Function Oriented vs Object Oriented Design Approach | Software Design Approaches
22	Software Project Management (SPM) with Real Live Examples
23	Risk Identification | Reactive vs Proactive Risk Management | Type of Risk with Real Life
24	Risk Assessment with Examples | Risk Management
25	Risk Control vs Risk Mitigation with Examples
26	Basic COCOMO and Intermediate COCOMO with Numerical
27	Critical Path Method (CPM) in Software Engineering
28	Verification vs Validation in Software Engineering
29	Types of Testing in Software Engineering | Levels of Testing
30	Error Sending in Software Testing | with Numerical Explanation
31	MCQs on Software Engineering
32	Question on Cyclomatic Complexity
33	Cohesion and Coupling in Software Engineering
34	Unit Testing with Examples
35	Integration Testing with Examples
36	System Testing with Examples
37	Types of System Testing
38	White Box Testing with Example
39	White Box vs Black Box Testing
40	Statement Coverage Technique White Box Testing
41	Condition Coverage in White Box Testing
42	Data Flow Testing Technique in White Box Testing
43	Boundary Value Testing | Black Box Testing
44	Perfective, Preventive, Adaptive, Corrective Maintenance in Software Engineering
45	MTBF vs MTTR | Mean Time Between Failure | Mean Time To Repair

46	Reverse Engineering with Real Life Example
47	Case Tools in Software Engineering
48	Performance Testing with Real Life Examples
49	Regression Testing with Real Live Examples
50	Introduction to UML with Examples
51	Use Case Diagram in UML
52	Sequence Diagram in UML
53	Activity Diagram in UML
54	Class Diagram in UML | Banking System with Real Life Example
55	Class Diagram in UML | Class vs Object UML Diagram with Real Life Example
56	Object Diagram in UL | Class vs Object UML Diagram with Real Life Example
57	RAD Model
58	RAD Model in Software Engineering
59	Function Point (FP) vs Line of Code (LOC) | Project Size Estimation
60	Function Point Analysis (FPA) | Function Point with Real Life Example
61	Function Point Calculation | How Project Estivation in Done Using FP
62	Aggregation vs Composition in UML with Examples
SOURCE: 02	**Software Engineering (SE | SEPM)**
01	Introduction to Software Engineering | Nature of Software
02	Generic Process Model | Process Framework Activities with Examples
03	SDLC with Real Life Example
04	Waterfall Model Complete Explanation
05	Iterative Development Model Complete Explanation
06	Incremental Process Model Complete Explanation with Example
07	Evolutionary Process Model Complete Explanation
08	Prototyping Model Complete Explanation with Example
09	Spiral Model Complete Explanation with Example
10	Concurrent Model Complete Explanation
11	Agile Model Complete Explanation with Example
12	All SDLC Models Revision
13	Functional vs Non-Functional Requirements with Examples | Requirement Engineering
14	Requirement Engineering | Establishing Ground Work | Users vs System Requirement
15	Requirement Engineering Tasks
16	Requirement Engineering Process | Elicitation| Specification | Validation | Management
17	Requirement Engineering Specification (SRS) | Complete Explanation with Example
18	KANO Model: Prioritizing Requirements with Examples
19	Requirement Models | Use Case | Activity | Class | Data Flow | State Diagram
20	Data Modeling Types and Techniques with Examples
21	Software Design | Quality Guidelines and Attributes with Examples
22	Software Design Concepts with Examples
23	Coupling and Cohesion with Examples
24	User Interface Design Model Complete Cxplanation
25	Architectural Design Model Complete Explanation
26	Component Level Design Complete Explanation with Example
27	Project Planning | Process with Examples
28	Project Scope Management
29	Work Breakdown Structure (WBS) with Example
30	Project Scheduling Process, Principles and Techniques with Example

31	Project Management Spectrum | 4P's with Example
32	W5HH Principle with Example | Boehm's Principle
33	Software Measurements and Metrics | LOC | FP
34	Software Project Estimation with Examples
35	Decomposition Techniques in Project Estimation
36	Software Cost Estimation
37	COCOMO Model with Solved Examples
38	Risk Management in Software Engineering
39	RMMM Plan with Example | Risk Mitigation, Monitoring and Management Plan
40	Software Configuration Management (SCM) | Process | Repository with Examples
41	Introduction and Principles of Software Testing
42	White Box Testing Techniques with Examples
43	Black Box Testing Techniques with Examples
44	Black Box vs White Box Testing
45	Unit Testing with Examples
46	Integration Testing with Examples
47	System Testing with Examples
48	Acceptance Testing with Example | Alpha vs Beta Testing
49	Verification vs Validation with Example
50	Defect / Bug Life Cycle Complete Explanation
51	Difference Between Software Testing and Debugging
52	Software Quality Dimensions | Metrics | Factors | Quality Management with Examples
53	Quality Assurance vs Quality Control
SOURCE: 03	**Software Engineering (SE COURSES)**
01	Introduction, Software Product, Process Activities and Ethics
02	Software Process, Activities, Rational Unified Process
03	Agile Software Development and Extreme Programming
04	Requirements Engineering, Specification, Validation and Management
05	System Modeling – Context, Interaction, Structural and Behavioral
06	Architectural Design Decisions, Views, Patterns and Applications
07	Design and Implementation, Design Pattern and Open Source Coding
08	Test-Driven Development and Release, User and Software Testing
09	Software Evolution and Maintenance, Legacy System Management
10	Sociotechnical System, Complex System and System Engineering
11	Security and Dependability, Safety, Availability and Reliability
12	Dependability, Safety, Security and Reliability Specification
13	Dependability Engineering and Programming Redundancy and Diversity
14	Security Engineering, Management, Risk Assessment and Design
15	Solid Principles in C# - Interview Question and Design Pattern in .NET – Coding Example