

OBJECT ORIENTED SOFTWARE ENGINEERING

- 1.Explain about Nature of the Software and Types of Software?
- 2.What are Software Engineering Activities and Explain about Software Quality?
- 3.Explain about Data Abstraction, Inheritance & Polymorphism?
- 4.Discuss about Reusability in Software Engineering and Postal Codes, Geometric Points
- 5.Define Domain Analysis and Types of Requirements
- 6.Explain about Techniques for Gathering and Analyzing Requirements?
- 7.Discuss about Requirement Documents, Reviewing Requirements.
- 8.Explain about Types of UML Diagrams with Examples?
- 9.Briefly discuss about Unified Modeling Language & Use Case Modeling?
- 10.Discuss about UML Class Diagrams and Associations and Multiplicity?
- 11.Explain about Generalization, Instance Diagrams and Interaction and Behavioural Diagrams
- 12.Explain about State Diagrams, Activity Diagrams, Component and Deployment Diagrams?
- 13.Explain about Design Process and Principles Leading to Good Design?
- 14.Discuss about Good Design Document, Software Architecture?
- 15.Discuss about The Multilayer, Client-Server, Broker, Transaction Processing, Pipe & Filter And MVC Architectural Patterns
- 16.What are Abstraction-Occurrence, General Hierarchical, Play-Role, Singleton?
- 17.Explain about Observer, Delegation, Adaptor, Façade, Immutable, Read-Only Interface and Proxy Patterns
- 18.Explain about Effective and Efficient Testing and Defects in Ordinary Algorithms?
- 19.Discuss about Numerical Algorithms, Timing and Co-ordination?
- 20.Define Software Project Management and explain about Activities of Software Project Management
- 21.Explain about Software Engineering Teams, Software Cost Estimation?
- 22.Discuss about Project Scheduling, Tracking and Monitoring?
- 23.What are Waterfall Model, The Phased Release Model, The Spiral Model
- 24.Explain about Evolutionary Model, The Concurrent Engineering Model, Rational Unified Process

WEB TECHNOLOGIES

- 1.Explain about Protocols in Computer Communications, the OSI Model, OSI Layer Functions.
- 2.Explain about A Virtual Network, Internetworking Devices, Repeaters, Bridges, Routers, Gateways?
- 3.Discuss about History of the Internet, Growth of the Internet, Internet topology
- 4.Define Internal Architecture of an ISP?
- 5.Explain about TCP/IP Basics and TCP/IP Example, the Concept of IP Address?
- 6.Explain about ARP,RARP,ICMP, Datagram, Fragmentation and Reassembly?
- 7.Discuss Relationship between TCP and IP & UDP and TCP?
- 8.Explain about Ports and Sockets, Connections-Passive Open and Active Open?
9. What is TCP Packet Format? Explain about User Datagram Protocol, UDP Packet?
- 10.Explain about DNS, Email, FTP, TFTP?
- 11.Explain about WWW, HTTP, TELNET?
- 12.Discuss about Electronic Commerce, Types of E Commerce?
- 13.Define Electronic Procurement? Explain about E-Procurement Models and E-Procurement Solutions?
- 14.Explain about Trading Models, Buyer Side Purchasing?
- 15.Explain about SCM & CRM? Web pages-Types and Issues?
- 16.Explain about Tiers and Web Pages, Static Web Pages?
- 17.Explain about A Concept of Microsoft and Java Technologies and Frames and Forms?
18. Explain about Dynamic Web Page Technologies? DHTML, CGI, ASP?
- 19.Discuss about Java Servlets and Java SeverPages(JSP)?
- 20.Explain about **Active Web Pages?** Lifecycle of Java Applets, Java Beans, Active X Controls?
- 21.Discuss about CORBA, RMI, Microsoft's Distributed Component Object Model?
- 22.Explain about EDI, Data Exchange Standards, Financial EDI, EDI and the Internet.
- 23.Explain about SGML and XML,XML parsers?
- 24.Explain about WAPArchitecture, The WAP Stack? Alternatives to WAP and Limitations of Mobile Devices.

INFORMATION SECURITY AND CRYPTOGRAPHY

1. Explain about security approaches and principles of security?
2. Explain about Plain Text and Cipher Text and Encryption and Decryption
3. Discuss about substitution and Transposition Techniques and Symmetric and Asymmetric Cryptography?
4. Explain about Stenography and key range and key size? Types of attacks.
5. What is number theory? Explain about Modular Arithmetic, Euclidean algorithm
6. Explain about Euler theorem, Fermat Theorem, Totient Function?
7. Discuss about Multiplicative and Additive Inverse?
8. Define Algorithm types and modes? Explain symmetric key cryptography?
9. Explain about DES , IDEA , Blowfish ,
10. Discuss about AES,Differential and Linear Cryptanalysis?
11. Explain about symmetric and asymmetric key cryptography?
12. Explain about RSA algorithm and digital signatures
13. Explain about Authentication basics – passwords- authentication tokens?
14. Discuss about certificate based authentication-biometrics Authentication?
15. Define Hash functions,SHA1?
16. Explain about Intruders, Viruses, Related Threats, Trusted Systems?
17. Explain about SSL-SHTTP-TSP-SET and 3Dsecure Protocol and SSL versus SET?
18. Explain about Electronic Money,Email security,WAP security,security in GSM?
19. Discuss about TCP/IP -Firewalls -IP Security-Virtual PrivateNetworks?