**Java**

1. Java datatype
2. OOP concepts
3. JVM memory model and internal architecture
4. Garbage collection
5. Pacakage, access modifier
6. Inheritance
7. Static and final
8. Java 8 lambda expression, default static method use
9. Java Enum
10. java type casting
11. Generics and collection
12. Java 8 stream and option
13. Thread
14. Concurrency
15. Design patterns
16. Solid design principals
17. Java serialization
18. java reflection and annotation
19. Different reference types in garbage collection

<https://www.geeksforgeeks.org/types-references-java/>

**Spring & J2EE**

1. Dependency injection
2. Bean lifecycle
3. Autowiring
4. Spring aop
5. Stereo type annotations
6. Spring boot basics
7. J2EE basics
8. REST basic
9. Spring transaction
10. Single sign on with SAML and Oauth2.0 and Openid security
11. Spring cloud and microservices
12. API gateway and service mesh
13. Circuit breaker
14. Logging mechanism(ELK stack)
15. Load balancing and architecture
16. Cache mechanism in Spring
17. JPA and hibernate

**DBMS**

1. ACID property
2. Database indexing
3. Database partitioning
4. Multitenant database
5. Sql queries
6. Different sql joins

**Kafka & Akka**

1. Actor model
2. Event sourcing
3. Event bus
4. Akka configuration
5. Akka supervision
6. Akka Eventbus
7. Why kafka
8. Java messaging system overview
9. Kafka broker cluster
10. Kafka producer
11. Kafka consumer and consumer group
12. Kafka offset

**Data Structure**

1. Linkedlist
2. Iterator
3. ArrayList and Arrays
4. Graph
5. Stack & Queue
6. Binary search tree
7. AVL tree
8. String

**Algorithm**

1. Searching
2. Sorting
3. Recursion
4. Dynamic programming
5. Backtracking
6. array problem solving
7. Time complexity calculation

**System Design**

1. How to upload a huge file using REST or servlet
2. How to control so many users who are storing some inmemmory cacahe
3. Shortening URL
4. Ecommerce ER diagram
5. Traffic signal design with state design pattern
6. LRU cache
7. Expired map
8. Design Quora
9. Design social networking like facebook twitter
10. Design makemytrip
11. Design bookmyshow