1. Continuous Integration (CI):

• **Meaning:** The practice of automatically integrating code changes from multiple contributors into a shared repository multiple times a day.

2. Continuous Deployment (CD):

• **Meaning:** The automated process of deploying code changes to production environments after passing automated tests in a CI/CD pipeline.

3. Infrastructure as Code (IaC):

• **Meaning:** Managing and provisioning infrastructure through machine-readable script files, enabling automation and consistency.

4. Configuration Management:

• **Meaning:** The process of managing and maintaining the state of infrastructure components through code or automation tools.

5. **Containerization:**

• **Meaning:** Packaging an application and its dependencies into a container to ensure consistency across different environments.

6. Microservices:

• **Meaning:** Architectural style where an application is composed of small, independent, and loosely coupled services.

7. Orchestration:

• **Meaning:** Coordinating and managing multiple containers or services to work together seamlessly.

8. **DevSecOps:**

• **Meaning:** Integrating security practices into the DevOps workflow to ensure security is prioritized throughout the development lifecycle.

9. **Git:**

• **Meaning:** A distributed version control system widely used for source code management and collaboration.

10. Jenkins:

• **Meaning:** An open-source automation server used for building, testing, and deploying code.

11. Artifact Repository:

• **Meaning:** A centralized location for storing and managing binary artifacts generated during the software development process.

12. Scalability:

• **Meaning:** The ability of a system to handle increased workloads or growing data without compromising performance.

13. Elasticity:

• **Meaning:** The ability of a system to automatically scale resources up or down based on demand.

14. Blue-Green Deployment:

• **Meaning:** A deployment strategy where two identical environments (blue and green) are alternately used for production, enabling seamless updates.

15. Rollback:

• **Meaning:** Reverting a system to a previous state or version in case of issues with a new deployment.

16. Infrastructure Monitoring:

• **Meaning:** Observing and tracking the performance and health of infrastructure components.

17. Log Aggregation:

• **Meaning:** Collecting and consolidating log data from various sources for analysis and troubleshooting.

18. Kubernetes:

• **Meaning:** An open-source container orchestration platform for automating the deployment, scaling, and management of containerized applications.

19. Immutable Infrastructure:

• **Meaning:** Treating infrastructure as unchangeable and recreating it entirely rather than modifying existing components.

20. Zero Downtime Deployment:

• **Meaning:** Deploying updates or changes without causing interruptions or downtime for end-users.

21. **GitLab:**

• **Meaning:** A web-based Git repository manager that provides CI/CD pipelines and other DevOps features.

22. Pipeline as Code:

• **Meaning:** Defining and managing CI/CD pipelines using code to ensure consistency and version control.

23. Load Balancing:

• **Meaning:** Distributing incoming network traffic across multiple servers to ensure even resource utilization and prevent overload.

24. Docker:

• **Meaning:** A platform for developing, shipping, and running applications in containers.

25. **Chef:**

• **Meaning:** A configuration management tool for automating the deployment and management of infrastructure.

26. **Puppet:**

• **Meaning:** An open-source configuration management and automation tool for managing infrastructure as code.

27. Ansible:

• **Meaning:** An open-source automation tool used for configuration management, application deployment, and task automation.

28. Serverless Computing:

Meaning: A cloud computing model where cloud providers manage infrastructure, allowing developers to focus on writing code without managing servers.

29. Monolithic Architecture:

• **Meaning:** An architecture where all components of an application are tightly integrated into a single codebase.

30. Infrastructure Provisioning:

• **Meaning:** Automatically creating and configuring infrastructure resources using tools like Terraform or CloudFormation.

31. Fault Tolerance:

• **Meaning:** The ability of a system to continue functioning even in the presence of failures or errors.

32. Greenfield Project:

• **Meaning:** A new project or application built from scratch without any legacy constraints.

33. Distributed Systems:

• **Meaning:** A system that consists of multiple independent components or services working together.

34. Chaos Engineering:

• **Meaning:** Intentionally injecting faults or disruptions into a system to identify weaknesses and improve resilience.

35. SLA (Service Level Agreement):

• **Meaning:** A commitment defining the expected level of service between a service provider and a customer.

36. Monitoring as Code:

• **Meaning:** Defining and managing monitoring configurations using code for consistency and version control.

37. Trunk-Based Development:

• **Meaning:** A development approach where developers work on a single branch (trunk), promoting continuous integration.

38. Feature Toggle:

• **Meaning:** A development technique to enable or disable specific features in an application during runtime.

39. Dark Launching:

• **Meaning:** Gradually rolling out new features or changes to a subset of users before full deployment.

40. Infrastructure Decomposition:

• **Meaning:** Breaking down monolithic infrastructure into smaller, more manageable components.

41. Collaborative Documentation:

• **Meaning:** Creating and maintaining documentation collaboratively within the development team.

42. Post-Mortem Analysis:

• **Meaning:** A thorough review and analysis of an incident or outage to identify root causes and prevent future occurrences.

43. DevOps Culture:

• **Meaning:** A cultural shift emphasizing collaboration, communication, and shared responsibility between development and operations teams.

44. Change Management:

• **Meaning:** The process of controlling and managing changes to infrastructure or code to prevent disruptions.

45. **Immutable Deployment:**

• **Meaning:** Deploying updates by replacing existing instances rather than modifying them.

46. Secrets Management:

• **Meaning:** Securely storing, managing, and distributing sensitive information such as passwords and API keys.

47. GitFlow:

• **Meaning:** A branching model for Git that defines a set of rules for managing branches in a project.

48. Swagger/OpenAPI:

• **Meaning:** A specification for building APIs, allowing both humans and computers to understand the capabilities of a service.

49. **Technical Debt:**

• **Meaning:** The metaphorical concept of accumulated work that needs to be done later due to shortcuts or quick solutions taken during development.

50. **Observability:**

• **Meaning:** The ability to understand and measure the internal state of a system by analyzing its outputs.

51. **Docker:**

• **Meaning:** An open-source platform for containerization that simplifies the deployment and scaling of applications.

52. Kubernetes:

• **Meaning:** An open-source container orchestration platform for automating the deployment, scaling, and management of containerized applications.

53. Scalability:

• **Meaning:** The ability of a system to handle increased loads by adding resources or optimizing performance.

54. Load Balancing:

• **Meaning:** Distributing incoming network traffic across multiple servers to ensure optimal resource utilization and prevent overload.

55. Version Control:

• **Meaning:** Managing changes to source code or other documents, allowing collaboration, tracking modifications, and maintaining a version history.

56. **Git:**

 Meaning: A distributed version control system widely used for source code management.

57. Jenkins:

• **Meaning:** An open-source automation server used for building, testing, and deploying code.

58. Artifact:

• **Meaning:** A deployable unit generated during the build process, such as a JAR or WAR file.

59. Pipeline:

• **Meaning:** A series of automated steps that code changes go through, typically including building, testing, and deployment.

60. Blue-Green Deployment:

• **Meaning:** A deployment strategy where two identical environments, "blue" and "green," are used to minimize downtime during updates.

61. Immutable Infrastructure:

• **Meaning:** Treating infrastructure as unchangeable, with updates achieved by replacing existing instances rather than modifying them.

62. Orchestration:

• **Meaning:** Coordinating and managing multiple automated tasks to achieve a specific outcome, often used in the context of container orchestration.

63. **Monitoring:**

• **Meaning:** Observing and collecting data about the performance and health of systems, applications, and infrastructure.

64. Alerting:

• **Meaning:** Notifying relevant parties when specific conditions or thresholds are met, helping to address issues promptly.

65. **Incident Response:**

• **Meaning:** A set of processes and activities to detect, respond to, and recover from incidents or outages.

66. Post-Mortem:

• **Meaning:** A retrospective analysis of an incident, focusing on identifying root causes and preventive measures.

67. Capacity Planning:

• **Meaning:** Forecasting and managing computing resources to meet current and future demands.

68. **HAProxy:**

• **Meaning:** An open-source load balancer and proxy server that distributes incoming traffic across multiple servers.

69. Firewall:

• **Meaning:** A network security device that monitors and controls incoming and outgoing traffic based on predetermined security rules.

70. Secrets Management:

• **Meaning:** Securely storing, managing, and distributing sensitive information such as API keys and passwords.

71. Ansible:

• **Meaning:** An open-source automation tool used for configuration management, application deployment, and task automation.

72. **Chef:**

• **Meaning:** A configuration management tool that automates the deployment and management of infrastructure.

73. **Puppet:**

• **Meaning:** An open-source configuration management tool for automating the provisioning and management of infrastructure.

74. **Terraform:**

• **Meaning:** An open-source IaC tool used for provisioning and managing infrastructure as code.

75. Serverless Computing:

• **Meaning:** A cloud computing model where cloud providers automatically manage the infrastructure, allowing developers to focus on writing code.

76. Elasticsearch:

• **Meaning:** An open-source search and analytics engine commonly used for logging and data analysis.

77. Log Aggregation:

• **Meaning:** Collecting and centralizing logs from multiple sources for analysis and troubleshooting.

78. **Prometheus:**

• **Meaning:** An open-source monitoring and alerting toolkit designed for reliability and scalability.

79. Grafana:

• **Meaning:** An open-source analytics and monitoring platform used to visualize and analyze data.

80. Load Testing:

• **Meaning:** Evaluating a system's performance under expected load conditions to identify bottlenecks and ensure scalability.

81. Failover:

• **Meaning:** Automatically redirecting traffic to a standby server or system in case of a failure.

82. Latency:

• **Meaning:** The time delay between the initiation of a request and the receipt of the response.

83. API Gateway:

• **Meaning:** A server that acts as an API front-end, receiving requests, enforcing throttling, and routing them to the appropriate Microservices.

84. Secret Rotation:

• **Meaning:** Periodically updating sensitive information, such as passwords or encryption keys, to enhance security.

85. Chaos Engineering:

• **Meaning:** Testing the resilience of a system by intentionally introducing disruptions to identify weaknesses and improve overall reliability.

86. Dependency Management:

• **Meaning:** Managing and tracking dependencies between different components or libraries in a software project.

87. Immutable Deployment:

• **Meaning:** Deploying applications by replacing the entire infrastructure, ensuring consistency and reliability.

88. **Pod:**

• **Meaning:** The smallest deployable unit in a containerized environment like Kubernetes, containing one or more containers.

89. Secret Store:

• **Meaning:** A secure repository for storing and retrieving sensitive information, often used for secrets management.

90. Infrastructure Scaling:

• **Meaning:** Adjusting the capacity of computing resources based on demand to ensure optimal performance.

91. Versioning:

• **Meaning:** Assigning unique identifiers or numbers to different versions of software or infrastructure configurations.

92. Rollback:

• **Meaning:** Reverting to a previous version of an application or infrastructure configuration in case of issues with the latest update.

93. Patch Management:

• **Meaning:** The process of updating and managing software patches to address security vulnerabilities and improve performance.

94. Podcast:

• **Meaning:** A digital audio or video file available for streaming or downloading, often used for sharing insights and discussions in the tech community.

95. Community of Practice:

- **Meaning:** A group of professionals with a shared interest or expertise who collaborate to learn and improve their skills.
- 96. **Continuous Integration (CI):** Automated process of integrating code changes into a shared repository multiple times a day.
- 97. **Continuous Deployment (CD):** Automated process of deploying code changes to production after passing CI tests.
- 98. **Pipeline:** An automated set of steps that code goes through from development to deployment.
- 99. **Infrastructure as Code (IaC):** Managing and provisioning infrastructure through code rather than physical hardware configuration.

- 100. **Docker:** Containerization platform for packaging, distributing, and running applications.
- 101. **Kubernetes:** Container orchestration platform for automating the deployment, scaling, and management of containerized applications.
- 102. **Microservices:** Architectural style that structures an application as a collection of small, independent services.
- 103. **Serverless:** Cloud computing model where cloud providers automatically manage the infrastructure, and developers focus on writing code.
- 104. **Scalability:** The ability of a system to handle increased load by adding resources or nodes.
- 105. **Monitoring:** Observing and tracking system performance, errors, and other metrics.
- 106. **Logging:** Recording events and activities within a system to aid in troubleshooting and analysis.
- 107. **Alerting:** Notification system that informs stakeholders about predefined events or issues.
- 108. **Version Control:** System for tracking and managing changes to source code.
- 109. **Git:** Distributed version control system widely used in software development.
- 110. **Repository:** Centralized location where version-controlled code is stored.
- 111. **Artifact:** A compiled or packaged piece of code or software.
- 112. **Binary Repository:** Storage for compiled binaries and artifacts.
- 113. **Jenkins:** Open-source automation server for building, testing, and deploying code.
- 114. **Ansible:** Automation tool for configuration management, application deployment, and task automation.
- 115. **Chef:** Configuration management tool for defining infrastructure as code.
- 116. **Puppet:** Configuration management tool for automating the provisioning and management of infrastructure.
- 117. **Terraform:** IaC tool for building, changing, and versioning infrastructure efficiently.
- 118. **Blue-Green Deployment:** A deployment strategy that reduces downtime by switching between two identical environments.
- 119. **Canary Release:** A deployment strategy that gradually rolls out a new version to a subset of users.
- 120. **Feature Toggle:** A technique to toggle features in an application on or off during runtime.

- 121. **Immutable Infrastructure:** An approach where once deployed, infrastructure components are never modified.
- 122. **Rollback:** Reverting a system to a previous state after a failed deployment.
- 123. **Zero Downtime:** A deployment strategy that ensures continuous availability during updates or changes.
- 124. **Dark Launch:** Introducing new features in a live environment but not exposing them to users.
- 125. **Failover:** The automatic switching to a backup system in case of a primary system failure.
- 126. **Load Balancer:** A device or service that distributes network traffic across multiple servers.
- 127. **Latency:** The time delay between the initiation of a request and the response.
- 128. **ChatOps:** Integrating chat tools into the DevOps workflow for collaboration and automation.
- 129. **Elasticity:** The ability of a system to automatically scale resources based on demand.
- 130. **Distributed System:** A system composed of multiple independent components that communicate and coordinate.
- 131. **Orchestration:** Coordinating and managing multiple automated tasks to achieve a specific outcome.
- 132. **Patch Management:** The process of keeping software and systems up-to-date with the latest patches.
- 133. **SLA (Service Level Agreement):** A formal commitment regarding the performance and availability of a service.
- 134. **SLO (Service Level Objective):** A target level of performance or reliability for a service.
- 135. **SLI (Service Level Indicator):** A measure of a specific aspect of a service's performance.
- 136. **Root Cause Analysis (RCA):** Investigating and identifying the primary cause of an incident or issue.
- 137. **Incident Response:** The process of managing and resolving incidents in a timely manner.
- 138. **CI/CD Pipeline:** A set of automated steps for continuous integration and continuous deployment.
- 139. **DevSecOps:** Integrating security practices into the DevOps process.
- 140. **Shift-Left Testing:** Performing testing earlier in the software development lifecycle.

- 141. **Infrastructure Monitoring:** Observing the performance and health of infrastructure components.
- 142. **Chaos Engineering:** Introducing controlled disruptions to a system to test its resilience.
- 143. **Automated Testing:** Using automation tools to execute tests and validate software.
- 144. **Test Driven Development (TDD):** Writing tests before writing the actual code.
- 145. **Container Registry:** A repository for storing and managing container images.
- 146. **Ephemeral:** Short-lived or temporary, often used to describe resources in cloud environments.
- 147. **Secret Management:** Securely storing and managing sensitive information such as passwords and API keys.
- 148. **Zero Trust Security Model:** A security model that assumes no trust and verifies each request.
- 149. **JWT (JSON Web Token):** A compact, URL-safe means of representing claims between two parties.
- 150. **OAuth:** An open standard for access delegation commonly used for authentication.
- 151. **Single Sign-On (SSO):** Allowing users to access multiple services with a single set of credentials.
- 152. **Capacity Planning:** Estimating the resources needed to support current and future workloads.
- 153. **Backlog:** A prioritized list of tasks or features yet to be addressed in a project.
- 154. **Burndown Chart:** A visual representation of completed and remaining work in a sprint or project.
- 155. **Agile:** A project management and product development approach that prioritizes flexibility and collaboration.
- 156. **Scrum:** An Agile framework for managing work with an emphasis on iterative and incremental development.
- 157. **Kanban:** A visual project management method for visualizing work, limiting work-in-progress, and maximizing flow.
- 158. **Velocity:** A metric in Agile development measuring the amount of work completed in a sprint.
- 159. **Story Points:** A measure used in Agile development to estimate the difficulty of implementing a user story.

- 160. **Retrospective:** A meeting held at the end of a sprint to review and improve the team's processes.
- 161. **Burnout:** A state of chronic physical and emotional exhaustion, often caused by prolonged stress.
- 162. **Pair Programming:** A development technique where two programmers work together at one workstation.
- 163. **Code Review:** A systematic examination of source code to find and fix errors.
- 164. **Technical Debt:** The cost of additional work required when code shortcuts are taken.
- 165. **Back-End:** The server-side of an application responsible for data processing and storage.
- 166. **Front-End:** The client-side of an application responsible for user interaction and presentation.
- 167. **Full Stack Developer:** A developer proficient in both front-end and backend technologies.
- 168. **CICD Server:** A server responsible for managing and executing the CI/CD pipeline.
- 169. **Master Branch:** The main branch in a version control system where the source code is kept.
- 170. **Feature Branch:** A branch created to develop a new feature or enhancement.
- 171. **Artifact Repository:** A system for storing and managing artifacts produced by the CI/CD pipeline.
- 172. **Versioning:** Assigning unique identifiers to different versions of software or code.
- 173. **Rolling Deployment:** Gradual deployment of changes across a set of servers or instances.
- 174. **On-Premises:** Software or infrastructure hosted within an organization's physical location.
- 175. **Cloud Computing:** The delivery of computing services over the internet, often provided by third-party providers.
- 176. **Hybrid Cloud:** A combination of on-premises and cloud-based services.
- 177. **Public Cloud:** Cloud resources and services offered to the general public.
- 178. **Private Cloud:** Cloud resources and services dedicated to a single organization.
- 179. **Multi-Cloud:** The use of multiple cloud providers for different services or applications.

- 180. **Failover Cluster:** A group of servers that work together to maintain high availability.
- 181. **Bare Metal Server:** A physical server dedicated to a single customer, providing full control over hardware.
- 182. **Cold Start:** The initial startup of a serverless function.
- 183. **Warm Start:** The reuse of a pre-initialized serverless function.
- 184. **Hot Start:** The immediate execution of a serverless function without startup delay.
- 185. **Capacity Management:** Planning and managing the resources needed to meet demand.
- 186. **HAProxy:** An open-source load balancer and proxy server.
- 187. **Nginx:** A web server and reverse proxy server.
- 188. **SSL/TLS:** Protocols for securing data transmission over the internet.
- 189. **VPN (Virtual Private Network):** A secure network connection over the internet.
- 190. **CDN (Content Delivery Network):** A network of distributed servers to deliver web content.
- 191. **Distributed Tracing:** Monitoring and tracing the path of requests through a distributed system.
- 192. **Log Aggregation:** Collecting and centralizing log data from various sources.
- 193. **Compliance:** Adhering to legal and regulatory requirements in software development.
- 194. **Bastion Host:** A server that provides access to a private network from an external network.
- 195. **Dark Data:** Unused or unanalyzed data within an organization.