Short Questions

1. Explain the concept of batch processing in JDBC.
2. How are batch statements executed in JDBC?
3. Discuss the InetAddress class and its methods in Java networking.
4. Explain the URL class and its significance in Java networking.
5. What are sockets, and how do they enable communication between client and server applications?
6. Describe the difference between TCP and UDP sockets.
7. How are TCP sockets established in Java?
8. What is DatagramPacket in Java networking?
9. How does DatagramSocket work in UDP socket programming?
10. Describe the characteristics of Java Beans.
11. Explain the components of a Java Bean.
12. What is the purpose of RMI registry in Java RMI?
13. How can you create a remote interface in RMI?
14. Discuss the steps involved in implementing RMI in Java.
15. What is stub and skeleton in RMI?
16. Explain the concept of serialization in RMI.
17. How do you create a server application using RMI?
18. Describe the role of the Naming class in RMI.
19. What are the advantages of using Java Beans in software development?
20. How can you create a Java Bean using IDEs like Eclipse or NetBeans?
21. Discuss the properties of a Java Bean.
22. Explain the significance of event handling in Java Beans.
23. What is property change listener in Java Beans?
24. Describe the event handling mechanism in Java Beans.
25. How can you use Java Beans in graphical user interface development?
26. What is a Java applet, and how does it differ from a standalone Java application?
27. Describe the life cycle of a Java applet.
28. How can images be added to a Java applet, and what is their significance?
29. Explain the process of adding sound to a Java applet.
30. What methods are available for passing parameters to a Java applet?
31. Discuss the concept of event handling in Java applets.
32. What are AWT controls, and how are they used in Java applications?
33. How does AWT handle windows, graphics, and text in Java?
34. Explain the role of layout managers in Java AWT.
35. Describe the implementation of menus in Java AWT applications.
36. What is a servlet, and what is its life cycle?
37. Discuss the components of the Servlet API and their functionalities.
38. How are HTTP requests and responses handled in servlets?
39. Explain the usage of cookies in servlet-based applications.

40. Describe the various techniques for session tracking in servlets.
41. What is JSP, and how does it complement servlets in web development?
42. How does XML facilitate data structuring and exchange between applications?
43. Describe the structure and content of a WSDL document.
44. What is the role of UDDI in web services, and how does it enable service discovery?
45. Discuss the architecture and characteristics of RESTful web services.
46. How can SOAP message-level security be implemented in Java web services?
47. Explain the significance of JSON in web services and its advantages.
48. What are web resources, and how are they identified and accessed in RESTful architecture?
49. Discuss the HATEOAS principle and its impact on RESTful web services.
50. Describe the advantages of using HTML5 and CSS3 in web development.
51. How does JavaScript enhance the interactivity of web pages?
52. What is dynamic memory allocation, and why is it important in C programming?
53. Explain the concept of recursion and its limitations in programming.
54. How are functions declared and implemented in structured programming?
55. Discuss the role of parameters and return types in function declaration.
56. Explain the concept of call by value and call by reference in function arguments.
57. What are the limitations of recursive functions, and how can they be mitigated?
58. Describe the process of dynamic memory allocation in C programming.
59. How is memory allocated and freed in C for arrays of different data types?
60. Explain the purpose of InetAddress and URL classes in Java networking.
61. What are sockets, and how do they enable communication between client and server applications?
62. Describe the difference between TCP and UDP sockets.
63. How are TCP sockets established and used in Java networking?
64. Discuss the DatagramPacket and DatagramSocket classes in UDP socket programming.
65. What are Java Beans, and what are their characteristics?
66. Describe the process of implementing RMI in Java for remote method invocation.
67. How do stubs and skeletons facilitate communication in RMI?
68. Explain the concept of serialization in RMI and its importance.
69. What steps are involved in creating a server application using RMI?

70. Describe the role of the Naming class in RMI for service registration and lookup.
71. How can you create a Java Bean, and what are its properties?
72. Discuss the significance of event handling in Java Beans.
73. What is the purpose of property change listeners in Java Beans?
74. How do you use Java Beans in graphical user interface development?

75. Explain the importance of utility classes in Java programming, and give examples of commonly used ones.
76. What is XML, and how is it different from HTML?
77. Explain the structure of an XML document.
78. What are XML namespaces, and why are they used?
79. What is XSL, and how does it relate to XML?
80. Describe the purpose of XSLT in XML document transformation.
81. What are web services, and how do they facilitate interoperability?
82. Discuss the role of UDDI in web services.
83. Explain the significance of WSDL in web services.
84. How are Java web services implemented and consumed?
85. What are web resources, and how are they used in web development?
86. How is form navigation achieved in XML?
87. Describe the process of creating XML documents.
88. How does XSL transform XML documents into different formats?
89. Discuss the concept of SOAP in web services.
90. What are RESTful services, and how do they differ from SOAP services?
91. Explain the role of JSON in web services.
92. How does WSDL define the interface of a web service?
93. What is the purpose of XML in web services?
94. Describe the structure of a WSDL document.
95. How do Java web services communicate over the internet?
96. Discuss the various types of web resources.
97. What is the significance of XML in web development?
98. How does XSLT transform XML data into HTML for web display?
99. Explain the importance of XML namespaces in XML documents.
100. How are XML documents validated against XML schemas?
101. Describe the process of consuming a web service in Java.
102. What are the advantages of using web services in modern applications?
103. Discuss the role of UDDI in web service discovery.
104. How does WSDL describe the functionality of a web service?
105. What are the characteristics of well-formed XML documents?
106. Explain the purpose of XML documents in web development.
107. How do Java web services handle HTTP requests and responses?
108. Discuss the components of a web service architecture.

109. What are the key features of XML?
110. Describe the process of parsing XML documents.
111. How do XSL templates transform XML data into other formats?
112. Discuss the benefits of using XML in data exchange.
113. Explain the role of XML in web service communication.
114. How does XML enable platform-independent data exchange?
115. What are the different types of web services?
116. Describe the components of an XML document.
117. Explain the concept of XML validation.
118. What are the advantages of using XML over other data formats?
119. Discuss the role of XML in data storage and retrieval.
120. How are XML documents structured?
121. Explain the purpose of XSLT in XML document processing.
122. What is the role of XML namespaces in XML documents?
123. Describe the process of transforming XML data using XSLT.
124. How are XML documents used in web development?
125. Discuss the relationship between XML and web services.