PERSONAL INTERVIEW QUESTIONS (20):

1. Tell me about yourself.

2. How would you describe yourself in a few words?

3. What are your greatest strengths?

4. What are your greatest weaknesses?

5. What are you passionate about?

6. How do your friends describe you?

7. Where do you see yourself in five years?

8. What motivates you to do a good job?

9. What are your professional goals?

10. What is your proudest accomplishment to date?

11. What did you enjoy most about your last job?

12. Why do you want to work here?

13. How do you handle stressful situations?

14. Do you prefer to work alone or on a team?

15. How do you handle constructive criticism?

16. How do you stay organized?

17. What does a typical day at work look like for you?

18. What are your hobbies outside of work?

19. What was the last book you read?

20. Who has inspired you most in your life, and why?

TECHNICAL INTERVIEW QUESTIONS (20):

1. Explain the importance of data structures. What are some real-world applications?

2. Differentiate between a stack and a queue. How would you implement a queue using two stacks?

3. What is hashing, and how does a hash map handle collisions? What is the average time complexity for its get() and put() operations?

4. Explain the concept of a binary search tree. What are the properties that make it a valid BST?

5. How would you detect a cycle in a linked list? Provide both iterative and recursive approaches.

6. Explain the difference between Breadth-First Search (BFS) and Depth-First Search (DFS) for graph traversal.

7. Explain the four pillars of object-oriented programming with real-world examples.

8. What is the difference between a class and an object?

9. Explain the difference between method overloading and method overriding.

10. What is a constructor? How does it differ from a regular method?

11. What is the main difference between a process and a thread?

12. Explain the concept of a deadlock. What are the necessary conditions for a deadlock to occur?

13. What is virtual memory, and how does it work?

14. Explain the concept of a "critical section" in concurrent programming.

15. Explain the concept of normalization in database design. Why is it important?

16. What are the ACID properties in database transactions? Explain each one.

17. Differentiate between `TRUNCATE`, `DELETE`, and `DROP` in SQL.

18. What is the difference between a primary key and a foreign key?

19. Explain the OSI model and its seven layers.

20. Differentiate between TCP and UDP protocols. When would you use one over the other?