

**CS101**

**Midterm important questions 2024**

**VU360**

Lecture 1-5:

1. What is the definition of computer science and its importance?
2. What are the main components of a computer system?
3. What is the difference between hardware and software?
4. What are the different types of programming languages?
5. What is the concept of algorithms and its importance in computer science?

Lecture 6-10:

6. What are the different types of data types (integer, float, char, etc.)?
7. How do you declare and initialize variables in programming?
8. What are the different types of operators (arithmetic, comparison, logical, etc.)?
9. How do you use control structures (if-else, switch, loops) in programming?
10. What is the concept of functions and modules in programming?

Lecture 11-15:

11. How do you use arrays and lists in programming?
12. What is the concept of object-oriented programming (OOP)?
13. How do you define classes and objects in OOP?
14. What is the concept of inheritance and polymorphism in OOP?
15. How do you use exception handling in programming?

Lecture 16-20:

16. What is the concept of data structures (arrays, linked lists, stacks, etc.)?
17. How do you use stacks and queues in programming?
18. What is the concept of trees and graphs in data structures?
19. How do you use sorting and searching algorithms in programming?

20. What is the concept of Big-O notation in algorithm analysis?

Lecture 21-22:

21. How do you analyze the complexity of algorithms using Big-O notation?

22. What is the concept of recursion and its importance in programming?