**Sample Questions**

**2 marks sample questions:**

1. List the different phases of the compiler.
2. What are the advantages of the Macro?
3. What is the difference between Compiler and Assembler?
4. Define Semantic analysis.
5. What is lexeme?
6. Define the term device driver.
7. What is difference between application and system software?
8. What are the limitations of the absolute loader?
9. Define the term system programs. List any four system programs.
10. Explain in brief about OPTAB.
11. Write the advantages of two pass assembler over one pass assembler.
12. Explain the term macros in brief.
13. Explain in brief about code generation phase of compiler.
14. Explain the concept of linking in brief.
15. Explain in brief about DOS Editor.
16. What is code optimization?
17. Explain the role of Loaders.
18. What is the need of Debuggers? Explain.
19. What do you mean by multi- window editor?
20. What is the disadvantage of Multipass assembler?
21. What do you mean by shell and shell scripts?
22. What are different language processor development tools widely used in practice?
23. What are the salient features of Vi Editor?
24. List various software tools used for debugging.
25. List advantages and disadvantages of binding at load time over binding at assembly time.
26. Differentiate between Macro and Subroutine.
27. Name the various databases used in the design of a compiler.
28. Name the techniques used for debugging.
29. Define system programming.
30. What is the disadvantage of Multipass assembler?
31. Define a subroutine.
32. What do you mean by semantic analysis?
33. Why we do code optimization?
34. What is the input and output of a LEX?
35. What is the purpose of using linker?
36. Name any five text editors.
37. What is the use of Format Painter in MS-Word?

**5 marks sample questions:**

1. Write a note on intermediate code generation in compiler.
2. What is linker? Explain the different linking scheme.
3. Explain the use of data structures in the assembler.
4. Differentiate between screen editor and word processor.
5. What is loader? Explain the working of the absolute loader.
6. Explain in brief about following : a) Linkers b) Assemblers
7. Explain the concept of recursive macro expansion with an example.
8. Write a detailed note on the lexical Phase of compiler.
9. Explain in detail about Line editor.
10. Describe in brief about various debugging techniques.
11. What are monolithic kernels and micro kernels? Compare both of them.
12. Discuss in detail the first pass of assembler with its algorithms
13. Explain two pass direct linking loader scheme with the help of a block diagram
14. What are various debugging techniques?
15. Differentiate between linker and loader.
16. Which of the phase in compiler design can be eliminated? What the effects are of eliminated this phase?
17. What are macro instruction arguments? Explain.
18. What data structures are required in pass I of an assembler? Describe in brief.
19. Write a short program to demonstrate the use of YACC.

**10 marks sample questions:**

1. Explain the two-pass assembler in detail with block diagram.
2. What is Macro? Why do we use macro? Explain the macro expansion with assembly code.
3. What is Debugger? Explain the various debugging techniques in detail
4. Write a detailed note on Single Pass assembler.
5. Explain in detail about various loading schemes.
6. Write a detailed note on full screen editor
7. What are linkage editors? How linkage editor works? What is the importance of load module or an executable image? Draw the block diagram of the files and step involved with a linkage editor.
8. What do you mean by Bootstrapping of a compiler? Name different phases of a compiler and
9. Explain how intermediate code generation phase is associated with syntax analysis and code optimization phase.
10. What is the difference between binder and overlays? Define dynamic loading.
11. What is parsing? Construct the parse tree for the following using BNF grammar:

X= U - V x W + X / Y

1. What is an editor? Name different editors available. Explain five different commands of vi-editor with examples.
2. Write short notes on : a. System programming b. Conditional macro expansions