SRINIVAS UNIVERSITY
INSTITUTE OF ENGINEERING AND TECHNOLOGY
MUKKA, MANGALURU

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

QUESTION BANK

SYTEM SOFTWARE AND COMPILER DESIGN

SUBJECT CODE: 19SCS61

COMPILED BY:

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MODULE 1

INTRODUCTION TO SYSTEM SOFTWARE

1.What is SIC machine architecture?

2.What are the components of SIC architecture?

3.What is the difference between SIC and SIC XE machine architecture.

4.What are the addressing modes available in SIC XE architecture?

5.What is an assembler explain?

6.What are the three types of assembler?

7.What are machine dependent assembler features?

8.What are machine independent assembler features?

9.What are the features of an Assembler?

10.What is assembler design options?

MODULE 2

LOADERS AND LINKERS

1.Whar arw basic loader functions? Explain

2.What are the features of loader?

3.What are types of loaders?

4.What are machine dependent and independent features?

5.Write differences between machine dependent and independent features?

6.What are linkers? Explain

7.Write the function of linkers.

8.Explain the difference between loaders and linkers.

9.Explain the implementation of loader.

10.Explain the implementation of linker.

MODULE 3

LEX AND YACC

1.Write a lex program to count the number of words in a sentence.

2.Explain the function of lex.

3.How does lex and yacc communicate?

4.What is the process of identifying parts of speech lexer?

5.How does yacc parser work?

6.How do you make a parser with yacc?

7.Explain fundamentals of rules lexer.

8.Distinguish between lexer and handwritten lexer.

9.What are the regular expressions used in lex specification?

10.What is the purpose of operator in lex?

11.Explain how lex provides support for contextual grammatical rules?

12.Give examples for regular expressions in lex and yacc.

MODULE 4

LANGUAGE PROCESSORS

1.What is language processor and its types?

2.What are the examples of language processor?

3.What are the 3 language processor?

4.Explain the structure of a compiler.

5.What are the 3 language processor?

6.What are compiler technologies?

7.Why is compiler necessary for application programming?

8.Explain the role of lexical analyzer in analysis.

9. What is specification of tokens in compiler design?

10.How regular expression are used for token specifications?

11.How are tokens specified and recognized in compiler design?

12.What are the different types of tokens in compiler design?

13.How tokens are recognized in compiler design?

14.What is the role of parser in syntax analyzer explain with the help of an example?

15.What is top-down parsing in compiler design with example

16. What are the two types of top-down parsing?

17.What is bottom-up parsing with example?

18.How many types of bottom-up parser are there?

19.What are the issues in the design of code generators?

20.What is code generation and code optimization?

MODULE 5

SYNTAX DIRECTED TRANSLATION

1.What is syntax directed translation?

2.What is the evaluation order of SDD?

3.What is SDD in compiler design?

4.What are the attributes of SDD?

5.What is a syntax tree in compiler design?

6.Which tree structure is used for syntax analysis?

7.What are variants of syntax tree in compiler design?

8.What is 3 address code in compiler design?

9.What are the types of three address code?

10.What are the issues in the design of a code generation?