

# Generated Question Set 2024

*SUBJECT: Compiler Design*

*SUBJECT CODE: CD101*

*MARKS: 30*

Question 1: 1 Describe input buffering scheme in lexical analyzer .

Marks: 3

Question 2: 4 What is Recursive Descent parsing? List the problems faced in designing such a parser.

Marks: 3

Question 3: 11 What are L-attributed definitions and S-attributed definitions in a syntax directed translation scheme?

Marks: 3

Question 4: 12 a) Find the LR(0) items for the grammar  $S \rightarrow SS \mid a \mid ?$ . b) Explain bottom - up evaluation of s -attributed definitions.

Marks: 9

Question 5: 2 Construct a regular expression to denote a language L over  $\Sigma = \{0,1\}$  accepting all strings of 0's and 1's that do not contain substring 011

Marks: 3

Question 6: 3 Consider the context free grammar  $S \rightarrow aSbS \mid bSaS \mid ?$  Check whether the grammar is ambiguous or not

Marks: 3

Question 7: 10 What are annotated parse trees? Give examples.

Marks: 3

Question 8: 8 Explain the main actions in a shift reduce parser

Marks: 3