

Question No : 1 of 26

Marks: 1 (Budgeted Time 1 Min)

In compilers, linear analysis is also called _____.

Answer (Please select your correct option)

- ☐ Lexical analysis
- ☐ Scanning
- ☐ Lexical analysis and scanning
- ☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 2 of 26

Marks: 1 (Budgeted Time 1 Min)

Back End of two-pass compiler uses _____ algorithm.

Answer (Please select your correct option)

☐ $O(n)$

☐ $O(n \log n)$

☐ NP Complete

☐ None of the Given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 3 of 26

Marks: 1 (Budgeted Time 1 Min)

The Back End of a compiler consist of _____.

Answer (Please select your correct option)

☐ Instruction selection

☐ Register allocation

☐ Instruction scheduling

☐ All of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 4 of 26

Marks: 1 (Budgeted Time 1 Min)

In Back End module of compiler, optimal register allocation uses _____.

Answer (Please select your correct option)

☐ $O(\log n)$

☐ $O(n \log n)$

☐ NP-Complete

☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 5 of 26

Marks: 1 (Budgeted Time 1 Min)

A lexeme is a sequence of characters in the source program that is matched by the pattern for a _____.

Answer (Please select your correct option)

☐ Linker

☐ Token

☐ Control flow

☐ None of given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 6 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ is a regular expression for the set of all strings over the alphabet $\{a\}$ that has an even number of a 's.

Answer (Please select your correct option)

☐ aa^*

☐ $(aa)^*$

☐ aa^*a

☐ $a(aa)^*$

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 7 of 26

Marks: 1 (Budgeted Time 1 Min)

What kind of abstract machine can recognize strings in a regular set?

Answer (Please select your correct option)

☐

DFA

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐

NFA

☐

PDA

☐

None of the given

Made By: Waqar Siddhu

Question No : 8 of 26

Marks: 1 (Budgeted Time 1 Min)



_____ algorithm is used in DFA minimization.

Answer (Please select your correct option)

☐ James's

☐ Robert's

☐ Hopcroft's

☐ None of given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)

In DFA minimization, we construct one _____ for each group of states from the initial DFA.

Answer (Please select your correct option)

☐ State

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ NFA

☐ PDA

☐ None of given

Made By: Waqar Siddhu

Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)

In Flex specification file, different sections are separated by _____.

Answer (Please select your correct option)

☐ %%

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ &&

☐ ##

☐ None of given

Made By: Waqar Siddhu

Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)

Recursive ____ parsing is done for LL(1) grammar.

Answer (Please select your correct option)

☐

Decent

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐

Ascent

☐

Forward

☐

None of the given

Made By: Waqar Siddhu

Question No : 12 of 26

Marks: 1 (Budgeted Time 1 Min)

Parser takes tokens from scanner and tries to generate _____.

Answer (Please select your correct option)

- ☐ Binary Search tree
- ☐ Parse tree.
- ☐ Binary Search tree and Parse tree.
- ☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)



_____ is an important component of semantic analysis.

Answer (Please select your correct option)

☐ Code checking

☐ type checking

☐ Flush checking

☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)

In predictive parsing table, the rows represents _____.

Answer (Please select your correct option)

- ☐ Terminals
- ☐ Both non-terminal and terminals
- ☐ Non-terminals
- ☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)

In LL(1) parsing algorithm, ____ contains a sequence of grammar symbols.

Answer (Please select your correct option)

☐ Stack

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ Link List

☐ Array

☐ None of the given.

Made By: Waqar Siddhu

Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid s$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

Answer (Please select your correct option)

☐ h, g, i

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ g

☐ h

☐ None of the given.

Made By: Waqar Siddhu

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid s$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

first of B is

Answer (Please select your correct option)

☐ h, i

☐ h, s

☐ g

☐ None of the given.

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B | s$
 $C \rightarrow C g | g | C h | i$
 $D \rightarrow A B | s$

First of B is _____.

Answer (Please select your correct option)

☐ h, i

☐ h, s

☐ g

☐ None of the given.

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid s$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

Answer (Please select your correct option)

☐ h, g

☐ h

☐ h, g, i, s

☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B | s$
 $C \rightarrow C g | g | C h | i$
 $D \rightarrow A B | s$

First of D is _____.

Answer (Please select your correct option)

☐ h, g

☐ h

☐ h, g, i, s

☐ None of the given

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid s$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

Answer (Please select your correct option)

☐ h, \$

☐ i

☐ g, \$

☐ None of the given.

Made By: Waqar Siddhu

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B | \varepsilon$
 $C \rightarrow C g | g | C h | i$
 $D \rightarrow A B | \varepsilon$

Follow of D is _____.

Answer (Please select your correct option)

☐ h, \$

☐ i

☐ g, \$

☐ None of the given.

Made By: Waqar Siddhu

Question No : 20 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ parsers never shifts into an error state.

Answer (Please select your correct option)

☐ LS

☐ LT

☐ LR

☐ LP

Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

Made By: Waqar Siddhu

Marks: 2 (Budgeted Time 4 Min)

Answer (Please [click here](#) to Add Answer)

Made By: Waqar Siddhu

Question No : 22 of 26

Marks: 2 (Budgeted Time 4 Min)

How linker plays an important role with respect to compiler construction?

Answer ([Please click here to Add Answer](#))

Normal Arial 12 B I U

Made By: Waqar Siddhu

Question No : 23 of 26

Marks: 3 (Budgeted Time 6 Min)

Can we call shift-reduce parsing as bottom up parsing? Justify your answer with reason.

Answer ([Please click here to Add Answer](#))

Normal Arial 12 B I U

Made By: Waqar Siddhu

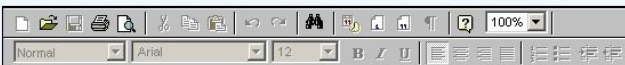
Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)

Considering the following grammar, calculate the first set of non-terminals S, A and B.

$S \rightarrow AB$
 $A \rightarrow a | \epsilon$
 $B \rightarrow b | \epsilon$

Answer ([Please click here to Add Answer](#))



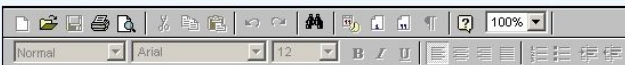
Made By: Waqar Siddhu

Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)

Suppose that you are going to construct a compiler for a regular language and currently you are constructing a suitable predictive parsing from the grammar. If you have a production rule which is not clear to expand a non-terminal then how will you handle this situation and what will you name this procedure.

Answer ([Please click here to Add Answer](#))



Made By: Waqar Siddhu

Question No : 26 of 26

Marks: 5 (Budgeted Time 10 Min)

Considering string "ab", show that the following grammar is ambiguous using parse trees. The ε below is epsilon.

$S \rightarrow A B A B$
 $A \rightarrow a A \mid \varepsilon$
 $B \rightarrow b B \mid \varepsilon$

Answer ([Please click here to Add Answer](#))

Normal Arial 12 B I U

Made By: Waqar Siddhu