Q#1

Parser takes tokens from scanner and tries to generate _____ .
Select correct option:
Binary Search tree
Parse tree
Syntax trace
None of the given

Question # 4 Flex is an automated tool that is used to get the minimized DFA (scanner).
Select correct option:
True
False

 Question # 5
Consider the grammar A --> B C D
B --> h B | epsilon
C --> C g | g | C h | i
D --> A B | epsilon
Follow of B is _____ .
Select correct option:
h
g, h, i, $
g, i
g

Question # 6

Consider the grammar A --> B C D

B --> h B | epsilon

C --> C g | g | C h | i

D --> A B | epsilon

Follow of C is _____ .
Select correct option:

g, h, i, $
g, h, $
h, i, $
h, g, $

Question # 7: Alternative of the backtrack in parser is Look ahead symbol in _____ .

Select correct option:

<u>Input</u>
Output
Input and Output
None of the given

 Question # 8: Typical compilation means programs written in high-level languages to low-level _____.
Select correct option:
<u>Object code</u>
Byted code
Unicode
Both Object Code and byte code

Question # 9: In Flex specification file different sections are separated by _____ .
Select correct option:

<u>%%</u>
&&
##
\\

Question # 10:   In DFA minimization we construct one _____ for each group of states from the initial DFA.
Select correct option:

<u>State</u>
NFA
PDA
None of given

Question # 1 of 10 (Start time: 11:19:10 PM) Total Marks: 1
Flex is an automated tool that is used to get the minimized DFA (scanner).
Select correct option:
True
False

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11:20 PM **me**: f   ker diya

Question # 2
An important component of semantic analysis is _____ .
Select correct option:
code checking
type checking
flush checking
None of the given

Question # 3
In PASCAL _____ represent the inequality test.
Select correct option:
:=
=
<>
None of the given

Question # 4
LR parsing _____ a string to the start symbol by inverting productions.
Select correct option:
Reduces
Shifts
Adds
None of the given

Question # 6
Left factoring is enough to make a grammar LL(1).
Select correct option:
True
False

Question # 7
In multi pass compiler during the first pass it gathers information about
_____ .
Select correct option:
Declaration
Bindings
Static information
None of the given

Question # 8
_____ phase which supports macro substitution and conditional compilation.
Select correct option:
Semantic
Syntax

Preprocessing
None of given

Question # 9
In parser the two LL stand(s) for _____ .
Select correct option:
Left-to-right scan of input
left-most derivation
All of the given
None of the given

Question # 10
Bottom-up parsers handle a _____ class of grammars.
Select correct option:
Large
Small
Medium
None of the given

2 Marks Questions
Q. In two pass assembler what is the objective of First Pass?
A one pass assembler passes over the source file exactly once, in the same pass collecting the labels, resolving future references and doing the actual assembly. The difficult part is to resolve future label references and assemble code in one pass.

Q. Brief note on Parser Generator
The earliest and still most common form of compiler-compiler is a parser generator, whose input is a grammar (usually in BNF) of a programming language, and whose generated output is the source code of a parser often used as a component of a compiler. Similarly, code generator-generators such as (Burg) exist, but such tools have not yet reached maturity.

Q. What is mean by Semantic Actions?
A compiler has to do more than just recognise if a sequence of characters forms a valid sentence in the language. It must do something useful with the parsed sentence

The semantic actions of a parser perform useful operations.
• Build an abstract parse tree.
• Type checking.
• Evaluation in the case of an interpreter.
• Begin the translation process in the case of a compiler.

In a recursive-descent parser the semantic actions are mixed in with the control flow of the parsing.

In some compiler constructors (such as JavaCC and Yacc) the semantic actions are attached to the production rules.

In other compiler constructors (SableCC for example) the syntax tree are automatically generated

3 Marks Questions

Q. What is mean by Intermediate Code?

The **intermediate code generation** phase transforms parse tree into an intermediate-language representation of the source program.

Intermediate codes are machine **independen**t codes, but they are close to machine instructions.

The given program in a source language is converted to an equivalent program in an intermediate language by the intermediate code generator.

Intermediate language can be many different languages, and the designer of the compiler decides this intermediate language.

- **syntax trees** can be used as an intermediate language.
- **postfix notation** can be used as an intermediate language.
- **three-address code (Quadraples)** can be used as an intermediate language

1. we will use quadraples to discuss intermediate code generation
2. quadraples are close to machine instructions, but they are not actual machine instructions.

- some programming languages have well defined intermediate languages.

1. java - java virtual machine
2. prolog - warren abstract machine
3. In fact, there are byte-code emulators to execute instructions in these intermediate languages.

Read more:

http://wiki.answers.com/Q/What_is_intermediate_code_generation#ixzz1vQA2ygJM

2nd answer:

Intermediate code is the register and Processor memory code given by the Programmer about the arrays passed by the PC.

Q. What is Relocation?

- Relocation. Compilers and assemblers generate the object code for each input module with a starting address of zero. Relocation is the process of assigning load addresses to different parts of the program by merging all sections of the same type into one section. The code and data section also are adjusted so they point to the correct runtime addresses.

5 Marks Questions   vuzs

Q. What are the components of CFG
control flow graph is the triplet CFG = < V, E, Entry >, where V = vertices or nodes, representing an instruction or *basic block* (group of statements), E = (V x V) edges, potential flow of control. Entry is an element of V, the unique program entry.
Q. Aik question Ambiguous Grimmer ka tha.

left recursion 5
bottom up parsing table 5
usefulness of relocating 3

Anohter paper...................

total question were 26 ,20 were mcqs and 6 were subjective questions two were 2 marks 2 were 3 marks and 2 were 5 marks mostly mcqs were related regular expression jlex and flex parsing and subjective questios were2 marks q was c++code were given and we find mistake second was relocation in compiler construction 5 marks q one context free grammer was given like that
S---------->AaBb
e-------->E
f--------> E
in that LL(1) grammer why or why not explain your answer in one or 2 lines
one scniro was given and we tell which compiler was best for this
2 marks q grammer in object-oriented

Time Left   89
            sec(s)

Quiz Start Time: 10:15 PM

Question # 5 of 10 (Start time: 10:19:55 PM)   Total Marks: 1

Following statement represents: if x relop y goto L

► Select correct option:

○ abstract jump

◉ Conditional jump

○ While loop

○ None of the Given

Click here to Save Answer & Move to Next Question

Time Left 89 sec(s)

Quiz Start Time: 10:15 PM

Question # 10 of 10 (Start time: 10:25:36 PM)   Total Marks: 1

S --> A | xb A --> aAb | x This grammar contains a reduce-reduce conflict.

► Select correct option:

○ True

○ False

Click here to Save Answer & Move to Next Question

Time Left 89 sec(s)

Quiz Start Time: 10:34 PM

Question # 1 of 10 (Start time: 10:34:50 PM)   Total Marks: 1

S --> a | B B --> Bb | E The non-terminal _____ is left recursive.

► Select correct option:

⦿ B

○ a

○ E

○ None of the given

Click here to Save Answer & Move to Next Question

Quiz Start Time: 10:34 PM

Question # 2 of 10 (Start time: 10:35:33 PM)   Total Marks: 1

S --> A | xb
A --> aAb | x This grammar contains a reduce-reduce conflict.

If a DFA states contains both [X → α •, a] and [Y → β •, a], then on input "a" we don't know which production to reduce with. This is called a *reduce-reduce conflict*. Usually due to gross ambiguity in the grammar.

► Select correct option:

○ True

              true

◉ False

► Click here to Save Answer & Move to Next Question

Quiz Start Time: 10:34 PM

Question # 3 of 10 (Start time: 10:36:41 PM)   Total Marks: 1

Grammars with LL(1) conflicts can be made LL(1) by applying left-factoring, substitution, and left-recursion removal. Left-factoring takes care of _____conflicts.

► Select correct option:

◉ FIRST/FIRST

○ FIRST/SECOND

○ SECOND/FIRST

○ None of the given

► Click here to Save Answer & Move to Next Question

Time Left 87 sec(s)

Quiz Start Time: 10:34 PM

Question # 4 of 10 (Start time: 10:38:01 PM)   Total Marks: 1

goto L statement represent

► Select correct option:

◉ Unconditional jump

○ Copy statement

○ Conditional jump

○ None of the given

Click here to Save Answer & Move to Next Question

Time Left 88 sec(s)

Quiz Start Time: 10:34 PM

Question # 5 of 10 (Start time: 10:38:25 PM)   Total Marks: 1

A lexical analyzer generator automatically constructs a _____ that recognizes tokens.

Select correct option:

○ FA

○ PDA

○ DP

○ None of the given

Click here to Save Answer & Move to Next Question

Time Left 88 sec(s)

Quiz Start Time: 10:34 PM

Question # 6 of 10 (Start time: 10:38:52 PM)   Total Marks: 1

What does following statement represent? x[i] = y

► Select correct option:

○ Prefix assignment

○ Postfix assignment

◉ Index assignment

○ None of the given

Click here to Save Answer & Move to Next Question

Time Left 83 sec(s)

Quiz Start Time: 10:34 PM

Question # 7 of 10 (Start time: 10:39:37 PM)   Total Marks: 1

Three-address codes are often implemented as a _____.

► Select correct option:

◉ Set of quadruples

○ Set of dubles

○ Set of singles

○ None of the given

Click here to Save Answer & Move to Next Question

Time Left **89** sec(s)

Quiz Start Time: 10:34 PM

Question # 8 of 10 (Start time: 10:40:00 PM)   Total Marks: 1

S --> A B A --> e | aA B --> e | bB - FIRST(S) contains ___ elements.

► Select correct option:

◉ 3

○ 4

○ 5

○ 6

Click here to Save Answer & Move to Next Question

Time Left 88 sec(s)

Quiz Start Time: 10:34 PM

Question # 9 of 10 (Start time: 10:41:23 PM)   Total Marks: 1

The error handling mechanism of the yacc parser generator pushes the input stream back when inserting 'missing' tokens.

► Select correct option:

⦿   True

○   False

► Click here to Save Answer & Move to Next Question

Time Left 81 sec(s)

Quiz Start Time: 10:34 PM

Question # 10 of 10 (Start time: 10:42:55 PM)   Total Marks: 1

What does the following statement represent? goto L

► Select correct option:

⦿   Unconditional jump

○   Copy statement

○ Conditional jump

○ None of the given

[Click here to Save Answer & Move to Next Question]

BC080401315 : Abdul Kareem

Question # 1 of 10 (Start time: 06:31:04 PM) Total Marks: 1
Parser always gives a tree like structure as output
Select correct option:

True
False

Question # 2 of 10 (Start time: 06:32:19 PM) Total Marks: 1
Lexer and scanner are two different phases of compiler
Select correct option:

True
False

Question # 3 of 10 (Start time: 06:33:49 PM) Total Marks: 1
Intermediate Representation (IR) stores the value of its operand in _____ .
Select correct option:

Registers
Memory
Hard disk
Secondary storage

Question # 4 of 10 (Start time: 06:35:17 PM) Total Marks: 1
In Flex specification file different sections are separated by _____ .
Select correct option:

%%
&&
##
\\

Question # 7 of 10 (Start time: 06:38:21 PM) Total Marks: 1
_____ phase which supports macro substitution and conditional compilation.
Select correct option:

Semantic
Syntax
Preprocessing
None of given

Question # 9 of 10 (Start time: 06:40:30 PM) Total Marks: 1
Flex is an automated tool that is used to get the minimized DFA (scanner).
Select correct option:

True
False

Question # 10 of 10 (Start time: 06:41:58 PM) Total Marks: 1
_____tree in which each node represents an operator and children of the node represent
the operands.
Select correct option:

Abstract syntax
Concrete syntax
Parse
None of the given

Question # 2 of 10 (Start time: 06:47:42 PM) Total Marks: 1
In _____certain checks are performed to ensure that components of a program fit together
meaningfully.
Select correct option:

Linear analysis
Hierarchical analysis
Semantic analysis
None of given

Question # 3 of 10 (Start time: 06:48:58 PM) Total Marks: 1
In compilation process Hierarchical analysis is also called
Select correct option:

Parsing
Syntax analysis
Both Parsing and Syntax analysis
None of given

Question # 5 of 10 (Start time: 06:51:46 PM) Total Marks: 1
Which of the following statement is true about Two pass compiler.

Select correct option:

Front End depends upon Back End
Back End depends upon Frond End
Both are independent of each other
None of the given

Sent at 6:52 PM on Friday
Question # 8 of 10 (Start time: 06:55:41 PM) Total Marks: 1
_____ algorithm is used in DFA minimization.
Select correct option:

James's
Robert's
Hopcroft's
None of given

Question # 9 of 10 (Start time: 06:56:23 PM) Total Marks: 1
Ambiguity can easily be handled by Top-down Parser
Select correct option:

True
False

		Time Left	8 sec(s)

Quiz Start Time: 10:49 PM

Question # 1 of 10 (Start time: 10:49:14 PM)   **Total Marks:** 1

In PASCAL _____ represent the inequality test.

🚩 **Select correct option:**

○ :=

○ =

○ <>   *Correct*

○ None of the given

▶ Click here to Save Answer & Move to Next Question

Time Left 51 sec(s)

Quiz Start Time: 10:49 PM

Question # 2 of 10 (Start time: 10:50:47 PM)   **Total Marks: 1**

In Three-pass compiler _____ is used for code improvement or optimization.

▶ **Select correct option:**

○ Front End

○ Middle End   *Correct*

○ Back End

○ Both Front end and Back end

▶ Click here to Save Answer & Move to Next Question

In compilation process Hierarchical analysis is also called

Time Left 66 sec(s)

Quiz Start Time: 10:49 PM

Question # 4 of 10 (Start time: 10:53:38 PM)   **Total Marks: 1**

Lexical Analyzer generator _____ is written in Java.

▶ **Select correct option:**

○ Flex

○ Jlex   *Correct*

○ Complex

○ None of given

▶ Click here to Save Answer & Move to Next Question

Time Left 64 sec(s)

Quiz Start Time: 10:49 PM

Question # 5 of 10 (Start time: 10:54:39 PM)   **Total Marks: 1**

_____avoid hardware stalls and interlocks.

▶ **Select correct option:**

○ Register allocation

○ Instruction scheduling   *Correct*

○ Instruction selection

○ None of given

Click here to Save Answer & Move to Next Question

Responsibility of _____ is to produce fast and compact code.

Select correct option:

○ Instruction selection   *Correct*

○ Register allocation

○ Instruction scheduling

○ None of given

Time Left 8 sec(s)

Quiz Start Time: 10:49 PM

Question # 7 of 10 (Start time: 10:56:49 PM)   **Total Marks: 1**

Flex is an automated tool that is used to get the minimized DFA (scanner).

Select correct option:

○ True   *Correct*

○ False

Click here to Save Answer & Move to Next Question

Time Left **30** sec(s)

Quiz Start Time: 10:49 PM

Question # 8 of 10 (Start time: 10:58:16 PM)   **Total Marks: 1**

In compiler linear analysis is also called.

▶ **Select correct option:**

○   Lexical analysis

○   Scanning

○   Both lexical analysis and scanning   *Correct*

○   None of the given

▶ Click here to Save Answer & Move to Next Question

Time Left **70** sec(s)

Quiz Start Time: 10:49 PM

Question # 9 of 10 (Start time: 10:59:40 PM)   **Total Marks: 1**

In Back End module of compiler, optimal register allocation uses_____ .

▶ **Select correct option:**

○   O(log n)

○   O(n log n)

○ N P-Complete

Correct

○ None of the given

► Click here to Save Answer & Move to Next Question

Time Left **42** sec(s)

Quiz Start Time: 10:49 PM

Question # 10 of 10 (Start time: 11:00:37 PM)   **Total Marks:** 1

_____ algorithm is used in DFA minimization.

► **Select correct option:**

○ James's

○ Robert's

○ Hopcroft's   **Correct**

○ None of given

► Click here to Save Answer & Move to Next Question