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Q#1

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

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

 $\begin{array}{l} \underline{\text{Question \# 5}}\\ \text{Consider the grammar A --> B C D}\\ \text{B} --> \text{h B} \mid \text{epsilon}\\ \text{C} --> \text{C g} \mid \text{g} \mid \text{C h} \mid \text{i}\\ \text{D} --> \text{A B} \mid \text{epsilon}\\ \text{Follow of B is }____}.\\ \text{Select correct option:}\\ \underline{\text{h}}\\ \text{g, h, i, \$}\\ \text{g, i}\\ \text{g} \end{array}$

Question # 6

Consider the grammar A --> B C D

B --> h B | epsilon

 $C \longrightarrow C g | g | C h | i$

 $D \rightarrow A B | epsilon$

Follow of C is _____. Select correct option:

<u>g, h, i, \$</u> g, h, \$ h, i, \$ h, g, \$

<u>Question # 7:</u> Alternative of the backtrack in parser is Look ahead symbol in ______.

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Select correct option:

<u>Input</u>

Output Input and Output None of the given

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

Question # 9: In Flex specification file different sections are separated by

Select correct option:

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

<u>Question # 10:</u> 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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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: := = \diamond 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 Ouestion # 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

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<u>Preprocessing</u> 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:	
<u>Large</u>	
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.

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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 intermediatelanguage 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?

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• 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 $CFG = \langle V, E, Entry \rangle$, where V = vertices or nodes, representing an instruction or *basic block* (group of statements), $E = (V \times V)$ 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 $\frac{89}{\sec(s)}$ ()



Quiz Start Time: 10:15 PM

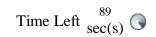
Question # 5 of 10 (Start time: 10:19:55 PM)

Total Marks: 1

Following statement represents: if x relop y goto L

Select correct option:

0	abstract jump	
	4	V
\odot	Conditional jump	
	-	V
0	While loop	
	▲	
0	None of the Given	A
	<u> </u>	
		Click here to Save Answer & Move to Next Question



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:

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True	<u> </u>	
4	T I I I I I I I I I I I I I I I I I I I	
False		
4		
	Click here to Save Answer & Move to Next Qu	uestio
	Time Left $\frac{89}{\sec(6)}$	(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:

 \odot В * €. \odot а .€ \odot * Е $^{\circ}$ None of the given .m. -€ Click here to Save Answer & Move to Next Question <u>www.vudesk.com</u> sardarmuddasar@gmail.com

Time Left $\frac{88}{\sec(s)}$ ()

Quiz Start Time: 10:34 PMTotal Marks: 1Question # 2 of 10 (Start time: 10:35:33 PM)Total Marks: 1 $S \rightarrow A | xb$ A --> aAb | x This grammar contains a reduce-reduce conflict.

If a DFA states contains both $[X \to \alpha \bullet, a]$ and $[Y \to \beta \bullet, a]$, 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.

\circ	True	
	4	→ true
۲	False	A
		Click here to Save Answer & Move to Next Question

Time Left $\frac{88}{\sec(s)}$ ()

Quiz Start Time: 10:34 PM

Select correct option:

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

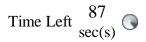
Total Marks: 1

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	
		-

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0	FIRST/SECOND	
	<u>↓</u>	
0	SECOND/FIRST	
	<u> </u>	
0	None of the given	
	<u>ــــــــــــــــــــــــــــــــــــ</u>	
		Click here to Save Answer & Move to Next Question



Quiz Start Time: 10:34 PM Question # 4 of 10 (Start time: 10:38:01 PM) goto L statement represent ► Select correct option:

۲	Unconditional jump	_
		
0	Copy statement	<u> </u>
		-
		Þ
0	Conditional jump	<u>^</u>
		-
		Þ
0	None of the given	
	4	▼ ▶

Total Marks: 1



Time Left $\frac{88}{\sec(s)}$ ()

Quiz Start Time: 10:34 PM

Select correct option:

Question # 5 of 10 (Start time: 10:38:25 PM)Total Marks: 1A lexical analyzer generator automatically constructs a _____ that recognizes tokens.

~	FA	
۲		
		_
\circ	PDA	
		*
0	DP	
_		
0	None of the given	
		_
	•	Click here to Save Answ er & Move to Next Question

Time Left $\frac{88}{\sec(s)}$ ()

Quiz Start Time: 10:34 PM Question # 6 of 10 (Start time: 10:38:52 PM) What does following statement represent? x[i] = y

Total Marks: 1

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Sel	lect correct option:	
0	Prefix assignment	A
	4	
0	Postfix assignment	
	▲	
•	Index assignment	
	4	
0	None of the given	<u>_</u>
	•	Click here to Save Answ er & Move to Next Question

Time Left $\frac{83}{\sec(s)}$ ()

Quiz Start Time: 10:34 PM

Question # 7 of 10 (Start time: 10:39:37 PM) Three-address codes are often implemented as a _____. ▶ Select correct option: Total Marks: 1

Set of quadruples
Set of dubles
Image: Set of dubles
Image:

		www.vudesk.com
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0	Set of singles	
	4	
0	None of the given	
	4	
		Click here to Save Answ er & Move to Next Question

Time Left $\frac{89}{\sec(s)}$ ()

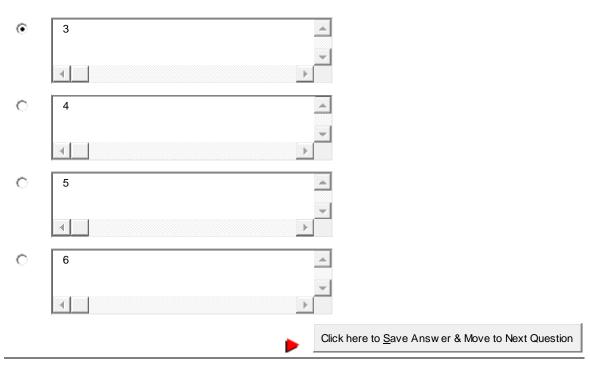
Quiz Start Time: 10:34 PM

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

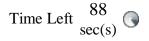
Total Marks: 1

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

Select correct option:



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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:

۲	True
0	False
	▼ ▼
	Click here to <u>Save Answer & Move to Next Question</u>

Time Left $\frac{81}{\sec(s)}$ ()

Quiz Start Time: 10:34 PM

Question # 10 of 10 (Start time: 10:42:55 PM) What does the following statement represent? goto L

Select correct option:

۲	Unconditional jump	
		T
0	Copy statement	
	▲	T

Total Marks: 1

	r r	
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Conditional jump	
	v
None of the given	<u>_</u>
	▼ _
	Click here to <u>S</u> ave Answ er & Move to Next Question
	lone of the given

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. <u>www.vudosk.com</u> <u>sardarmuddasar@gmail.com</u>

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 $\begin{cases} 8 \\ \sec(s) \end{cases}$
Quiz St	art Time: 10:49 PM	
Questio	n # 1 of 10 (Start time: 10:49:14 PM)	Total Marks: 1
In PASC	AL represent the inequality test.	
Sele	ct correct option:	
0		
0		
0	<>	

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0	None of the given	Þ	▲ ▼
			Click here to <u>Save</u> Answer & Move to Next Question

Quiz St	art Time: 10:49 PM	Time Left 51 sec(s)	Q
	n # 2 of 10 (Start time: 10:50:47 PM)	Total Mark	s: 1
In Three	-pass compiler is used for code in	e improvement or optimization.	
🕨 Sele	ct correct option:		
0	Front End		
0	Middle End	<u>^</u>	
		E Correct	
0	Back End	A	
0	Both Front end and Back end	A	
	•	Click here to <u>Save</u> Answer & Move to Next Quest	ion:

In compilation process Hierarchical analysis is also called

ſ

Quiz Start Time: 10:49 PM		Time Left $\frac{66}{\text{sec(s)}}$
Question # 4 of 10 (Start time: 10:53:38 P	M)	Total Marks: 1
Lexical Analyzer generator	is written in Java.	
Select correct option:		

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0	Flex	*
		▼
0	Jlex	▲ ▼
		Correct
0	Complex	
		×.
0	None of given	
		<u>·</u>
		Click here to <u>Save</u> Answer & Move to Next Question

Quiz S	tart Time: 10:49 PM	Time Left $64_{sec(s)}$
Questi	on # 5 of 10 (Start time: 10:54:39 PM)	Total Marks: 1
	avoid hardware stalls and interlocks.	
🕨 Sel	ect correct option:	
0	Register allocation	
0	Instruction scheduling	
	Correct	
0	Instruction selection	
0	None of given	

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		Click here to <u>S</u> ave Answer & Move to Next Question
D	11.11.4	
		e fast and compact code.
Sele	ct correct option:	
0	Instruction selection	
		v
		Derrect
0	Register allocation	A
		T
0	Instruction scheduling	
		► E
~	None of given	
0	None of given	

Quiz S	tart Time: 10:49 PM	Time Left $\begin{cases} 8\\ \sec(s) \end{cases}$
Questio	on # 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).	
Sel	ect correct option:	t
C	False	
	Click here to <u>S</u> av	e Answer & Move to Next Question

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		Time Left 30 sec(s)
Quiz Sta	art Time: 10:49 PM	
Question	n # 8 of 10 (Start time: 10:58:16 PM)	Total Marks: 1
In compi	ler linear analysis is also called.	
▶ Sele	ct correct option:	
0	Lexical analysis	
0	Scanning	
0	Both lexical analysis and scanning	
	Correct	
0	None of the given	
	Click here to <u>S</u> ave Answe	er & Move to Next Question
		Time Left 70 sec(s)
	art Time: 10:49 PM	
1	n # 9 of 10 (Start time: 10:59:40 PM)	Total Marks: 1
In Back	End module of compiler, optimal register allocation uses	
🕨 Sele	ct correct option:	
0	O(log n)	
0	O(n log n)	

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0	N P-Complete
	✓ Correct
0	None of the given
	Click here to Save Answer & Move to Next Question

Quiz S	tart Time: 10:49 PM	Time Left $42_{sec(s)}$
Questic	on # 10 of 10 (Start time: 11:00:37 PM)	Total Marks: 1
ĺ	algorithm is used in DFA minimization.	
🕨 Sele	ect correct option:	
0	James's	
0	Robert's	
	I F	
0	Hopcroft's	
	Correct	
0	None of given	
	Click here to <u>Save Answ</u>	ver & Move to Next Question
Γ		