

**Semester: VI** 

Name:

**Enrolment No:** 

## UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

**End Semester Examination, July 2020** 

**Course: Compiler Design** 

Program: B.Tech-CS- OSSOS/MAD/MC

Time 02 hrs. **Course Code: CSEG3015** Max. Marks: 100

Instructions: There are 60 multiple choice questions. All are compulsory.

Points: 1

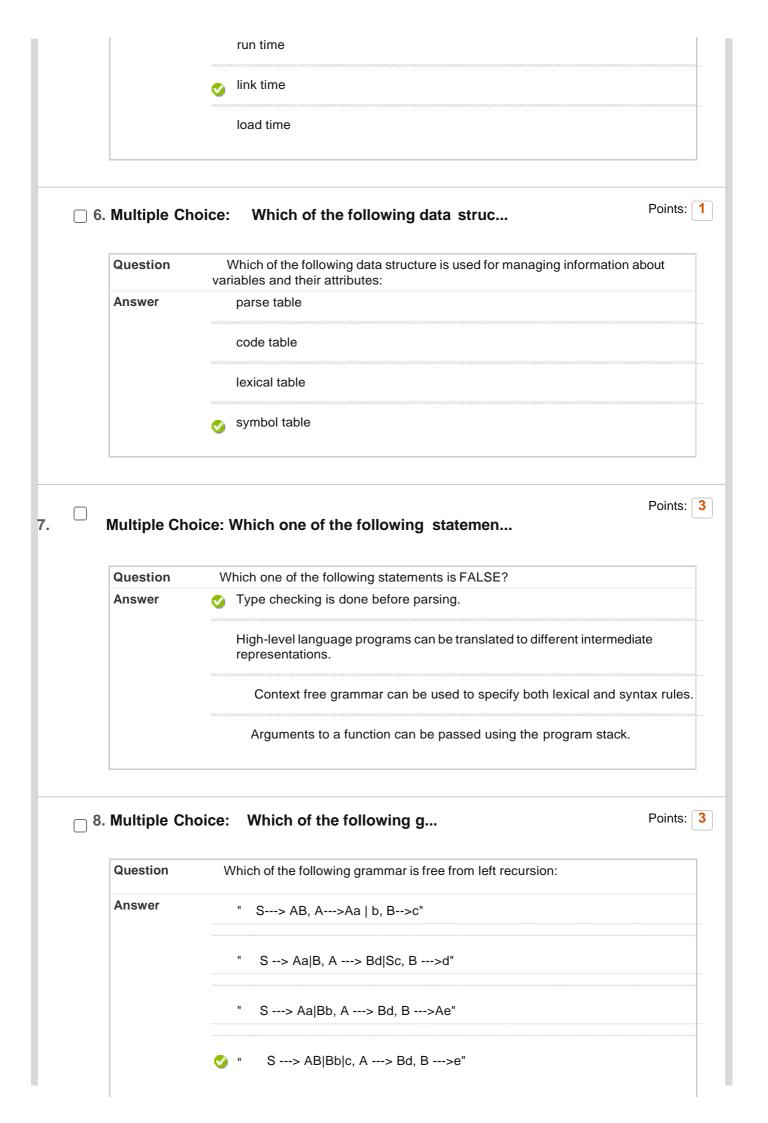
1. Multiple Choice: "In a compiler, keywords of a language...

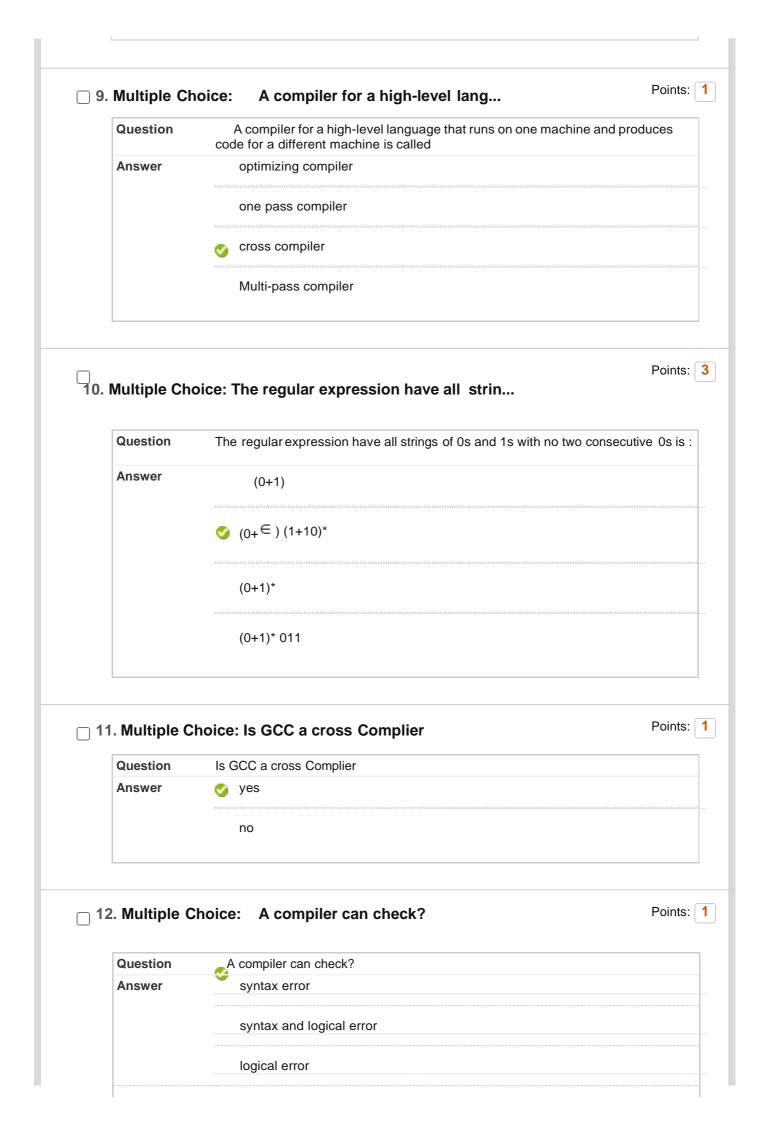
Question	"In a compiler, keywords of a language are recognized during"
Answer	parsing of the program
	code generation
	✓ lexical analysis
	none

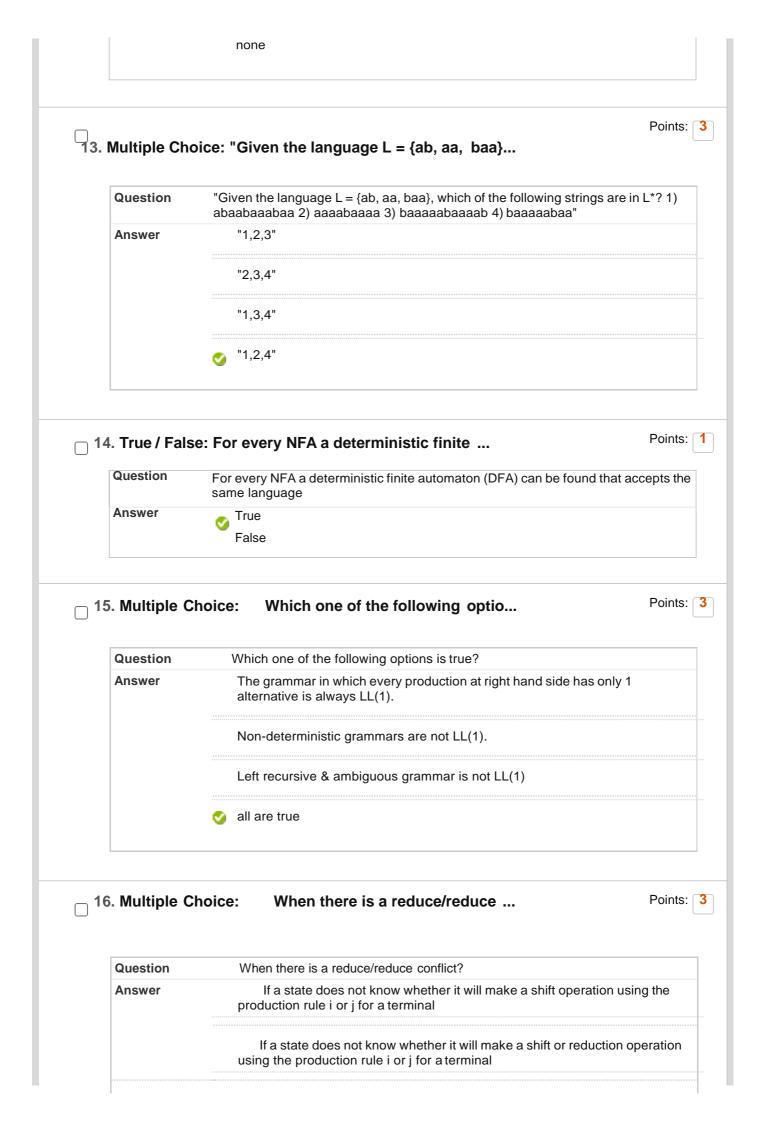
Points: 3

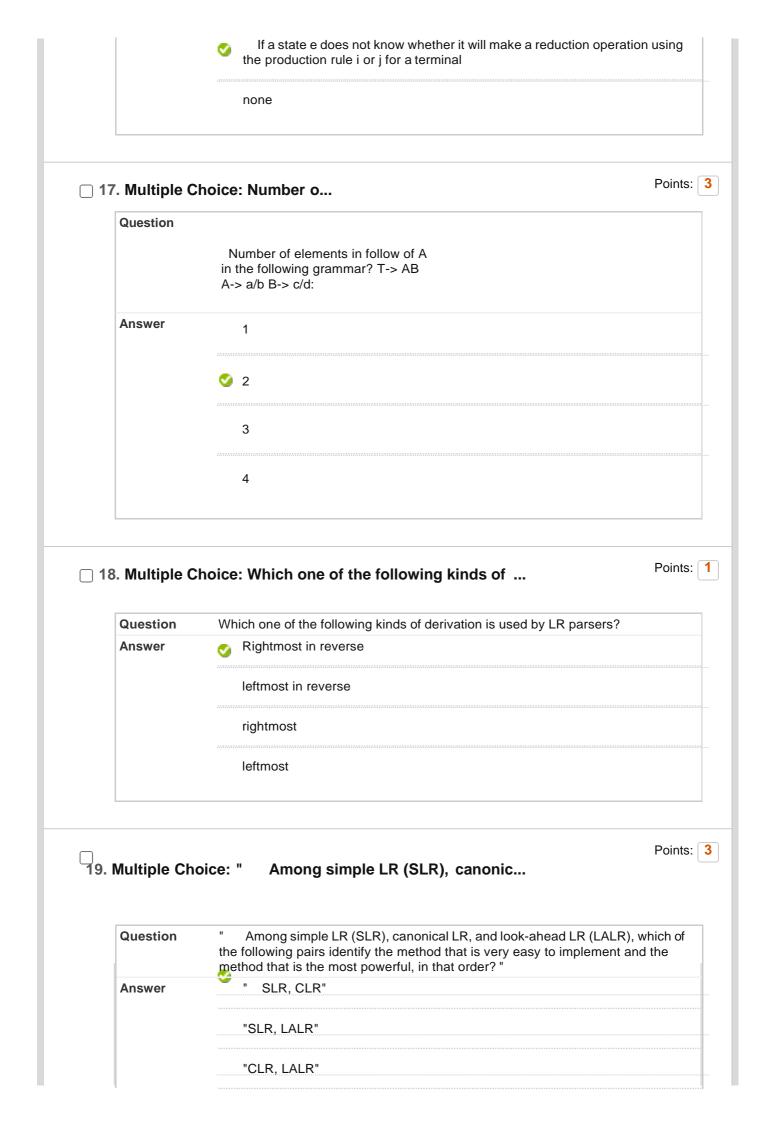
2. Multiple Choice: How many derivatio...

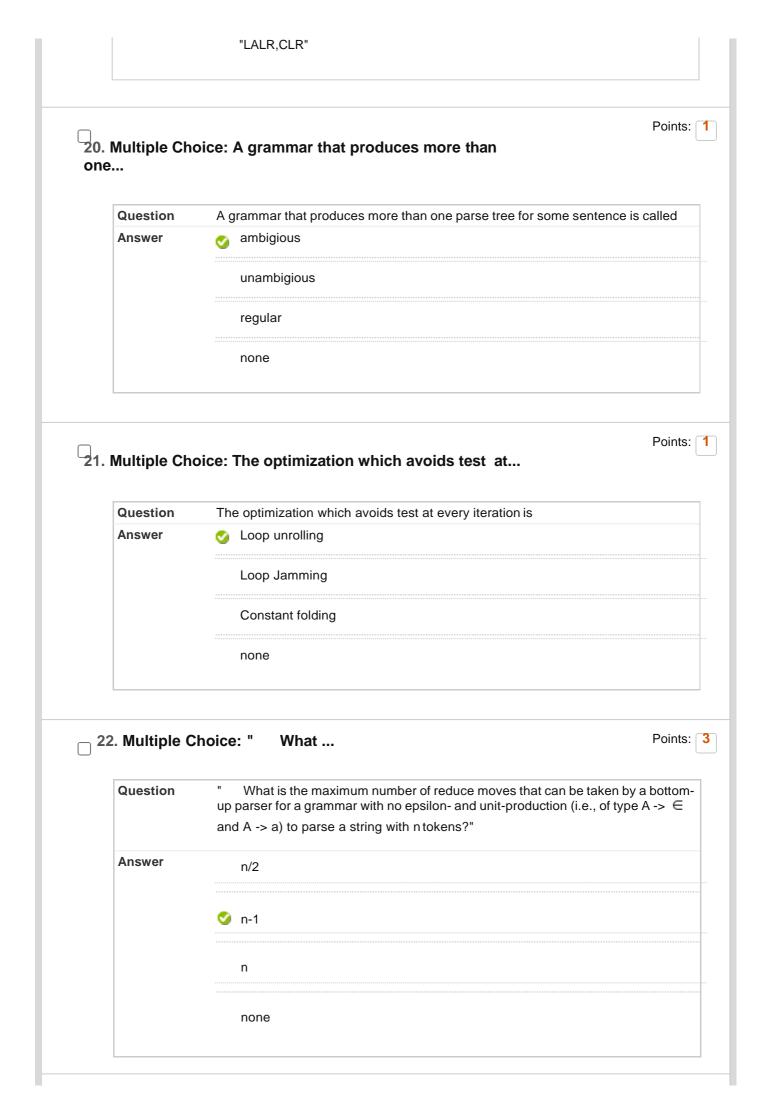
	How many derivation trees are there for string aaa given grammar G? S $\rightarrow$ aS Sa $\mid$ a			
Answer	3			
	4			
	5			
	6			
Multiple Ch	noice: An identifier is permitted to be			
Question	An identifier is permitted to be a letter followed by any number of letter and digits. Which of the following expression defines an identifier:			
Answer	(L+D)*			
	(L+D)+			
	L(L+D)+			
	∠(L+D)*			
Multiple Ch	noice: " The number of tokens in the followi  "The number of tokens in the following C statements are: printf( i=%d, &i=%x ,			
-	ioloc. The number of tokens in the followin:			
Question	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"  10			
Question	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"  ✓ 10  3			
Question	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"  10  3  21			
Question	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"  ✓ 10  3			
Question Answer	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"  10  3  21			
Question	"The number of tokens in the following C statements are: printf( i=%d, &i=%x , );"			

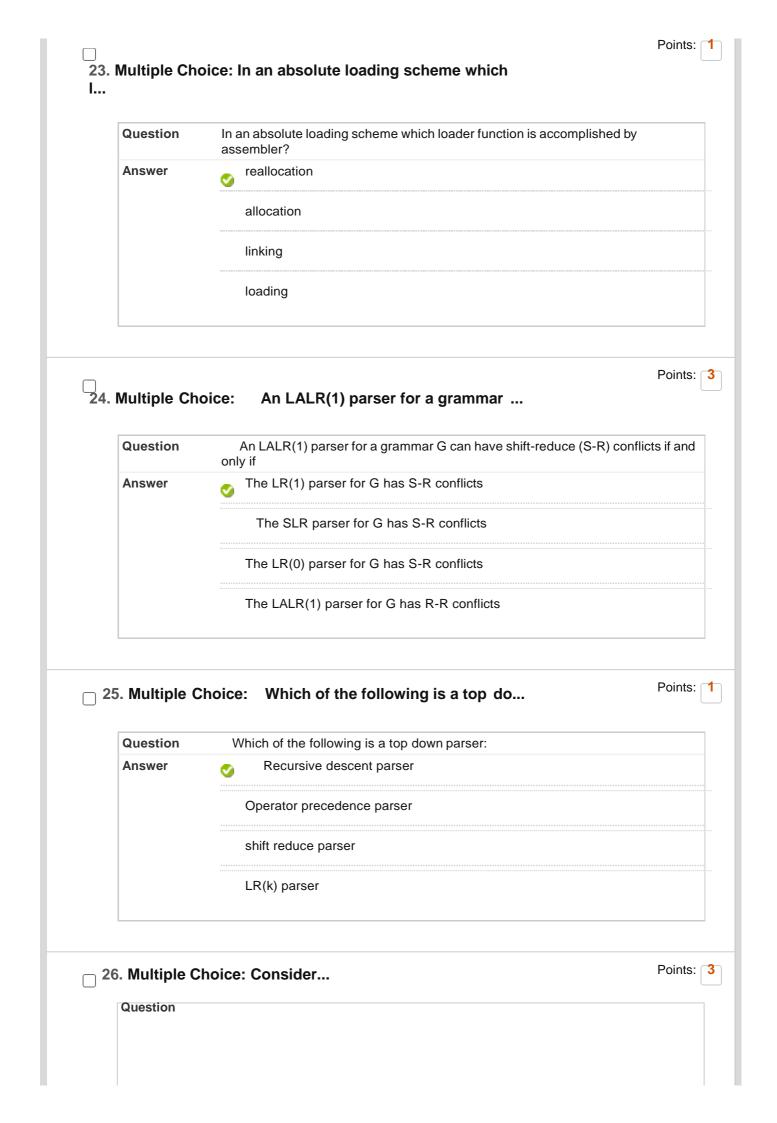




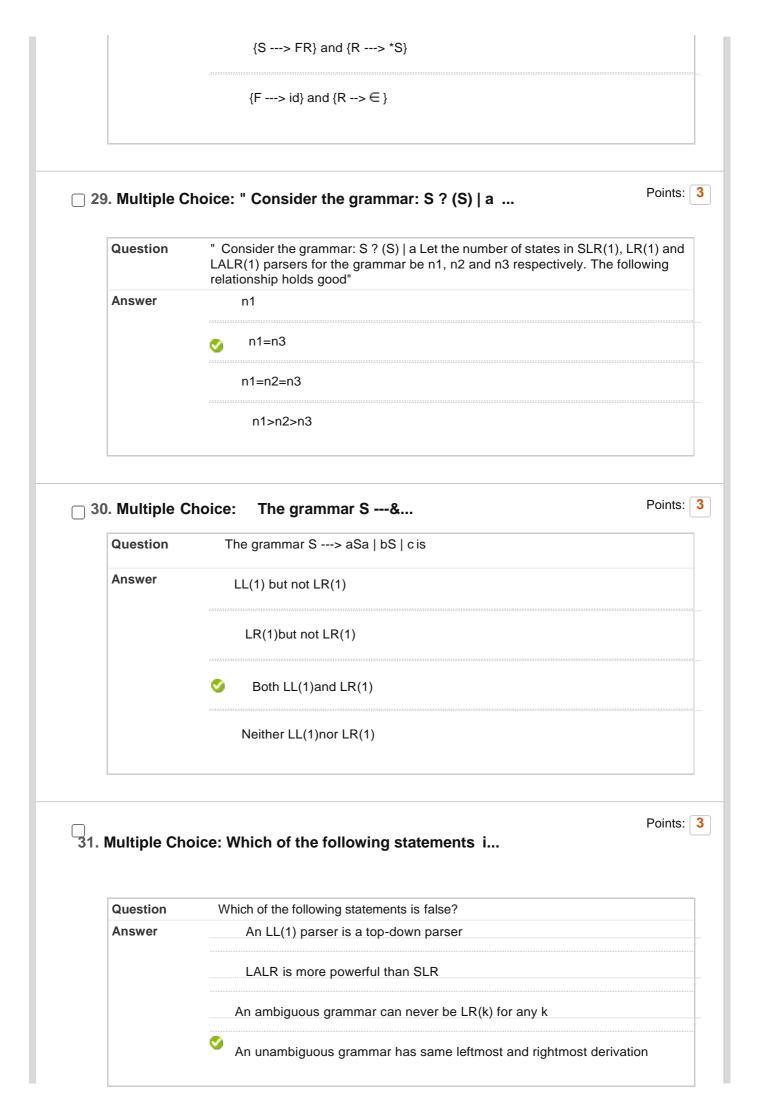


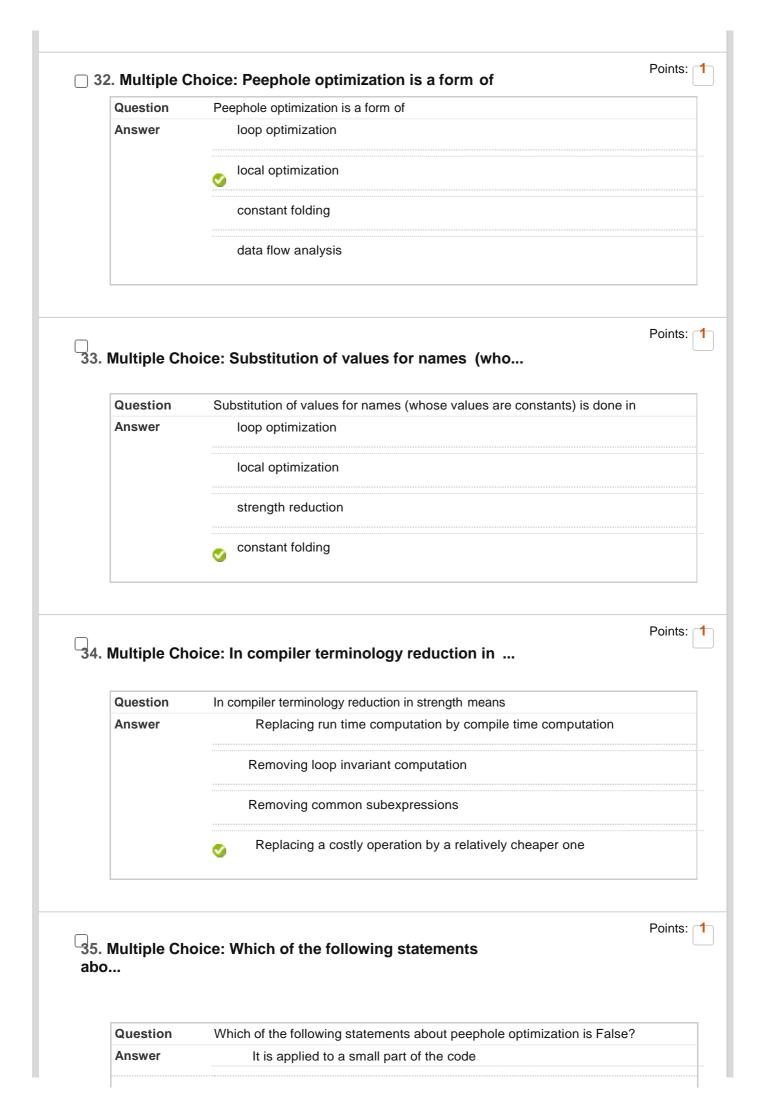


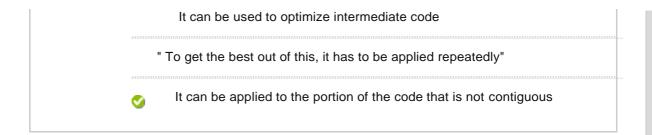




	Consider the grammar with non-terminals N = {S,C,S1 },terminals T={a, b, i, t, e}, with S as the start symbol, and the following set of rules: S> iCtSS1 a S1> eS c C> b The grammar is NOT LL(1) because:				
Answer	context free				
	ambigious				
	left recursive				
	right recursive				
7. Multiple C	Choice: &n	Point			
Question	A canonical set of items is given below S> L. > R Q> R. On input symbol < the set has				
Answer	A S-R and R-R conflict	W1504150415041			
	A S-R but not R-R conflict	**************			
	A R-R but not S-R conflict	M16A12A12A			
	✓ Neither S-R nor R-R conflict				
3. Multiple C	Choice: " Consider the following	Point			
B. Multiple C	Choice: " Consider the following  " Consider the following grammar: $S>FR$ , $R> S \mid \in$ , $F>$ id In the predictive parser table, M, of the grammar the entries M[S, id] and M[R, \$] respectively."	Point			
	" Consider the following grammar: $S> FR$ , $R> S \mid \in$ , $F> id In the predictive parser table, M, of the grammar the entries M[S, id] and M[R, $]$	Point			







36. Multiple Choice: The graph that shows basic blocks and...

Control graph

hamiltonian graph

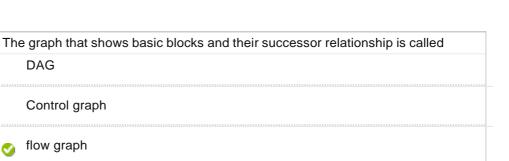
flow graph

DAG

Question

Answer

Points: 1



37. Multiple Choice: Dead-code elimination in machine code...

Points: 1



Question	Dead-code elimination in machine code optimization refers to:
Answer	Removal of all labels
	Removal of values that never get used
	Removal of function which are not involved
	Removal of a module after its use

38. Multiple Choice: Some code optimizations are carried o...

Points: 1



Question Some code optimizations are carried out on the intermediate code because: **Answer** they enhance the portability of the compiler to other target processors program analysis is more accurate on intermediate code than on machine code the information from dataflow analysis cannot otherwise be used for optimization

