Question **8**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one phase is considered best to verify Lexeme and grammar accurately map on each other?

Select one:

- a. syntax Phase ✖
- b. Semantic Phase
- c. Code Generation Phase
- d. code optimization phase

Your answer is incorrect.

The correct answer is: Semantic Phase

Question **7**

Correct

Mark 2.00 out of 2.00

Flag question

A language consists of Multiple a (must appear once), may or may not present of c , and all combinations of b & c , over sigma {a,b,c}

Select one:

- a. a*cc?(b+c)*
- b. a^+c?(b+c)* ✔
- c. a^+(a+b)* c?
- d. none of above

Your answer is correct.

The correct answer is: a^+c?(b+c)*

Question **6**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one computational Model help to build a Scanner?

Select one:

- a. Turing Machine
- b. PDA ✖
- c. FA
- d. Transition Graph

Your answer is incorrect.

The correct answer is: FA

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

Printf ("Sum of Two numbers",c); what is the token name of "c " in C language?

Select one:

- a. literals
- b. keywords
- c. variable
- d. identifier ✔

Your answer is correct.

The correct answer is: identifier

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

What is the purpose of the symbol table?

Select one:

- a. Management of CFG
- b. Management responsible for all phases
- c. Management of variables
- d. All of above ✔

Your answer is correct.

The correct answer is: All of above

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

Which one phase of compiler responsible for back end working?

Select one:

- a. Code Optimization ✔
- b. Semantic Analysis
- c. Intermediate Code Generation
- d. Syntax Analysis

Your answer is correct.

The correct answer is: Code Optimization

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Is "abbb" a string? over language L= {start with a and end with b}?

Select one:

- True ✔
- False

The correct answer is 'True'.

Question **2**

Correct

Mark 2.00 out of 2.00

Flag question

Match the questions with the right answers.

Which one regular expression is equal to $a^+?$ aa* ✔

Which one regular expression is equal to $a^*?$ (a*)* ✔

Your answer is correct.

The correct answer is: Which one regular expression is equal to $a^+? \rightarrow aa^*$, Which one regular expression is equal to $a^*? \rightarrow (a^*)^*$

Question **7**
Incorrect
Mark 0.00 out of 1.00
Flag question

which section of flex responsible for global variables declaration?

Select one:
- a. definition section
- b. Rule section
- c. user code section
- d. anywhere ✖

Your answer is incorrect.
The correct answer is: definition section

Question **8**
Correct
Mark 1.00 out of 1.00
Flag question

What is the relation between NFA-accepted languages and DFA accepted languages?

Select one:
- a. >
- b. !=
- c. <
- d. = ✔

Your answer is correct.
The correct answer is: =

Question **5**
Correct
Mark 2.00 out of 2.00
Flag question

<A> 0 begins B; { printf ("accepted");} What it represents?

Select one:
- a. 0 move from state A to B which is Accepting state also ✔
- b. not determine
- c. 0 move from state A to B
- d. 0 move from state A to B which is starting state also

Your answer is correct.
The correct answer is: 0 move from state A to B which is Accepting state also

Question **6**
Correct
Mark 2.00 out of 2.00
Flag question

LANCE tool is used for code optimization Phase?

Select one:
- True ✔
- False

The correct answer is 'True'.

Question **3**

Correct

Mark 1.00 out of 1.00

Flag question

Operator "*" means :

Select one:

- a. one time no output and second time to onward continue words repetition ✔
- b. Ambiguous
- c. non stop
- d. continue words repetition

Your answer is correct.

The correct answer is: one time no output and second time to onward continue words repetition

Question **4**

Incorrect

Mark 0.00 out of 1.00

Flag question

Why we need to minimize the DFA ? Select more than correct options

Select one or more:

- a. to enhance property
- b. all of above ✖
- c. to reduce complexity
- d. to ease of code

Your answer is incorrect.

The correct answers are: to reduce complexity, to ease of code

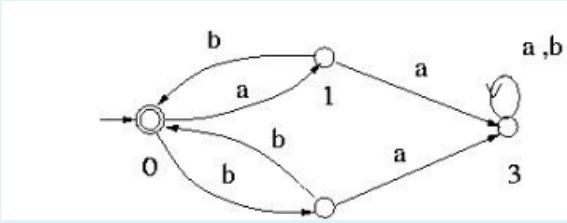
Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

Which will be equivalent regular expression of given DFA?



Select one:

- a. aa+ab* + (aa+b)
- b. (a+b)*
- c. None of above
- d. (ab+bb)* a (a+b)* ✔

Your answer is correct.

The correct answer is: (ab+bb)* a (a+b)*

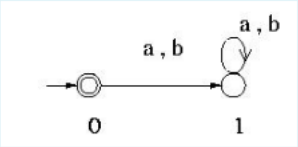
Question **1**

Incorrect

Mark 0.00 out of 2.00

Flag question

Which one language accepted by given DFA? select two or more options:



Select one or more:

- a. Null
- b. ab
- c. abab ✖
- d. aaabbb

Your answer is incorrect.

The correct answer is: Null

Question **8**
Correct
Mark 1.00 out of 1.00
Flag question

convert the following expression into CFG.
a* + a*b(a+b)*

Select one:

a. S=> X|K

X=>aX|^

K=>XbL

L=>aL|bL|^

b. S-> aS|aSbG
G->aG|bG

c. S-> P|G
P->aP|^
G->PbL
L->aL|bL|^ ✔

d. S-> X|G

G->XbL

L->aL|bL|^

Your answer is correct.
The correct answer is: S-> P|G
P->aP|^
G->PbL
L->aL|bL|^

Question **7**
Correct
Mark 1.00 out of 1.00
Flag question

Select the all options which one are Non-terminals. (select two or more if possible)

Select one or more:

- a. beta ✔
- b. *stmt* ✔
- c. *expression* ✔
- d. **else**
- e. **if**

Your answer is correct.
The correct answers are: *stmt*, *expression*, beta

Question **6**

Incorrect

Mark 0.00 out of 1.00

Flag question

Grammar "G" follow un-ambiguous grammar , and Right recursive also.But, still grammar "G" hold two parse tree. What would you suggest issue prevail in it?

Select one:

- a. loop forever issue
- b. hang the compiler program
- c. Non Deterministic
- d. Deterministic ✘

Your answer is incorrect.

The correct answer is: Non Deterministic

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

How many categories hold for CFG in case of compiler construction? If one is solved then next stages are required to correct CFG before writing a code in Bison . select no. of CFG categories.

Select one:

- a. none of these
- b. 6
- c. 2 each category
- d. 3 ✔

Your answer is correct.

The correct answer is: 3

Question **3**

Correct

Mark 2.00 out of 2.00

Flag question

In case of Two Parse trees, one follow alpha*beta and other generate beta alpha*, Which one parser acceptable for compiler.

Select one:

- a. one of these
- b. alpha*beta ✔
- c. beta alpha*
- d. both alpha*beta and beta alpha*

Your answer is correct.

The correct answer is: alpha*beta

Question **4**

Correct

Mark 1.00 out of 1.00

Flag question

What is the main disadvantage of backtracking?

Select one:

- a. both Time and memory consumption ✔
- b. Memory consumption
- c. Always use Non terminal
- d. Time consuming

Your answer is correct.

The correct answer is: both Time and memory consumption

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

IF grammar hold Left Recursion and Unambiguous , Is it possible this grammar can hold two parse tree?

Select one:

- True ✔
- False

The correct answer is 'True'.

Question **2**

Correct

Mark 2.00 out of 2.00

Flag question

Is this grammar Ambiguous or not?

C->C^D|D

A->A&B | B

B->B%C|C

D->d

Select one:

- a. No ✔
- b. yes
- c. None one correct annswer
- d. may or may not be ambiguous

Your answer is correct.

The correct answer is: No

Question **8**

Incorrect

Mark 0.00 out of 2.00

Flag question

Find the Follow() of B.

L->aABCT

A->b

B->C

C-> d

T-> e

Select one:

- a. e
- b. e,$
- c. $ ✖
- d. d

Your answer is incorrect.

The correct answer is: d

Question **7**

Correct

Mark 1.00 out of 1.00

Flag question

Which one is the formula of Left factoring?

Select one:

- a. A-> alpha A'
  A'-> A1| A2 | A3| null
- b.
  None of above ✔
- c. A-> Beta A'
  A'->alpha A'/ Null
- d. A-> Beta A'
  A'->alpha A'

Your answer is correct.

The correct answer is:
None of above

Question **6**
Incorrect
Mark 0.00 out of 2.00
Flag question

Kindly tick the right option which one is unambiguous CFG , by using following terminals and Non terminals.
Terminals:!=, <= , % , id
Non-Terminals: E, F, T, G

Select one:

- a.
  E->T !=E/T
  T->T <= F/F
  F->G%F / G
  G-> id ✗
- b. E->E != T /T
  T->T <= F/F
  F->G%F / G
  G-> id
- c.
  E->T<=E/T
  T->T != F/F
  F->G%F / G
  G-> id
- d.
  E->E !=T/T
  T->F <= T/F
  F->G%F / G
  G-> id

Your answer is incorrect.
The correct answer is: E->E != T /T
T->T <= F/F
F->G%F / G
G-> id

Question **5**
Correct
Mark 1.00 out of 1.00
Flag question

What is the first () of the given CFG?
S-> baaS|a

Select one:

- a. b
- b. {^,a,b}
- c. (a,b)
- d. {a,b} ✓

Your answer is correct.
The correct answer is: {a,b}

Question **3**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one CFG is best for Compiler construction?

Select one:

- a. Right recursive and non deterministic only enough ✖
- b. Left recursive only enough
- c. Right Recursive, Ambiguous, and Deterministic
- d. Right Recursive

Your answer is incorrect.

The correct answer is: Right Recursive

Question **4**

Incorrect

Mark 0.00 out of 1.00

Flag question

IS this grammar ambiguous?

E->E+T/T

T->F*T/F

F->id

Select one:

- True ✖
- False

The correct answer is 'False'.

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

Which one is third step of Predictive Parser processes?

Select one:

- a. First and Follow Function
- b. Parser Table
- c. PArser Tree
- d. Stack Implementation ✔

Your answer is correct.

The correct answer is: Stack Implementation

Question **2**

Incorrect

Mark 0.00 out of 1.00

Flag question

S->aS|bE

E->e|aT

T-> a

Word : abe . How many recursive call will be occurred?

Select one:

- a. 3 ✖
- b. 1
- c. 2
- d. 4

Your answer is incorrect.

The correct answer is: 1

Question **20**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one R.E generate from the given grammar.
S->XS|^
X->P|L
P->aPT
T->aT|bT|^
L->abL|ab

Select one:

- a. a*(b+a)*+ (ab)+
- b. None of these ✖
- c. [a*(b+a)*+ (ab)(ab)*]*
- d. a*(a+b)*+ [(ab)*]*

Your answer is incorrect.

The correct answer is:
[a*(b+a)*+ (ab)(ab)*]*

Question **17**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one Left factoring grammar?

Select one:

- a. S->1S' S'->S10S'|^ ✖
- b. L->0L' L'->S|P
- c. T=>1T' T'=>P|L
- d. S->S0S1S|01

Your answer is incorrect.

The correct answer is:
L->0L'
L'->S|P

Question **16**

Incorrect

Mark 0.00 out of 1.00

Flag question

The grammar defines simple operation.In this grammar, the terminal symbols are : >= , +=, * , \ and non -terminals are: P,L,A,B,F

Select one:

a. P->P+=L|L
L->L>=A|A
A->A+B|B
B->B*F|F
F->id

b. P->P+=L|L
L->L+A|A
A->A>=B|B
B->B*F|F
F->id

c. P=>P+L|L
L=>L*A|A
A=>A>=B|B
B=>B+=F|F
F->id

d. P->P+L|L
L->L*A|A
A->A>=B|B
B->B+=F|F
F->id ✖

Your answer is incorrect.

The correct answer is: P->P+=L|L
L->L>=A|A
A->A+B|B
B->B*F|F
F->id

Question **14**
Incorrect
Mark 0.00 out of 1.00
Flag question

Perform operator precedence parser table over following grammar, and tell whether parser build over this given grammar is ambiguous or unambiguous?
S->S+S| S^S|S*S|a

Select one:
- a. Ambiguous ✖
- b. can't be guess
- c. May or May not be ambiguous
- d. unambiguous

Your answer is incorrect.
The correct answer is: unambiguous

Question **15**
Correct
Mark 1.00 out of 1.00
Flag question

To make Efficient grammar formation for compiler, which one types of grammar is useful and did allow the formation of two parse tree? Select all correct options

Select one or more:
- a. LR ✖
- b. Deterministic ✔
- c. Right Recursive ✔
- d. LL(1) ✖

Your answer is correct.
The correct answers are: Right Recursive, Deterministic

Question **12**
Correct
Mark 1.00 out of 1.00
Flag question

LL(1) parser is a type of backtracking parser.

Select one:
- True
- False ✔

The correct answer is 'False'.

Question **13**
Correct
Mark 1.00 out of 1.00
Flag question

Which one is not terminal? select all correct options

Select one or more:
- a. *statement* ✔
- b. *condition* ✔
- c. if ✖
- d. else ✖

Your answer is correct.
The correct answers are: *condition*, *statement*

Question **11**

Correct

Mark 1.00 out of 1.00

Flag question

```
#include <iostream>
using namespace std;

// declaring a function
void greet() {
    cout << "Hello there!";
}

int main() {

    // calling the function
    greet();

    return 0;
}
```

How did you analyse this code in semantic phase of compiler?

Select one:

- a. Lexical code
- b. L-attribute
- c. Synthesis Attribute ✔
- d. both S-attribute and L-attribute

Your answer is correct.

The correct answer is: Synthesis Attribute

Question **10**

Incorrect

Mark 0.00 out of 1.00

Flag question

Which one grammar is ambiguous?

Select one or more:

- a.

  P=>P+L|L
  L=>L*A|A
  A=>A>=B|B
  B=>B+=F|F
  F->id

- b. None of these grammar ✖

- c. A->A&B | B
  B->B%C|C
  C->C^D|D
  D->d

- d. S->S0S1S|01

Your answer is incorrect.

The correct answers are: A->A&B | B
B->B%C|C
C->C^D|D
D->d,

P=>P+L|L
L=>L*A|A
A=>A>=B|B
B=>B+=F|F
F->id
, S->S0S1S|01

Question **9**

Incorrect

Mark 0.00 out of 1.00

Flag question

IF grammar hold Left Recursion and Unambiguous , Is it possible this grammar can hold two parse tree?

Select one:

- True
- False ✖

The correct answer is 'True'.

Question **8**

Partially correct

Mark 0.50 out of 1.00

Flag question

E → id { E.type:=lookup(id.entry) }

E → literal { E.type:=char }

E → int { E.type:=int }

E → real { E.type:=real }

E → E1 mod E2 { if (E1.type=int and E2.type=int) then E.type:=int else E.type:=type-error }

E → E1 [E2] { if (E2.type=int and E1.type=array(s,t)) then E.type:=t else E.type:=type-error }

E → E1 ↑ { if (E1.type=pointer(t)) then E.type:=t else E.type:=type-error }

int A(1,7); int ✔

E=2 √2 type-error ✖

Your answer is partially correct.

You have correctly selected 1.

The correct answer is: int A(1,7); → int, E=2 √2 → real

Question **7**

Correct

Mark 1.00 out of 1.00

Flag question

In case of Two Parse trees, one follow alpha*beta and other generate beta alpha*, Which one parser acceptable for compiler.

Select one:

- a. None of these
- b. beta alpha*
- c. alpha*beta ✔
- d. both alpha*beta and beta alpha*

Your answer is correct.

The correct answer is: alpha*beta

Question **6**

Correct

Mark 1.00 out of 1.00

Flag question

Which one recursive decent parser without backtracking? select all correct options

Select one or more:

- a. None of these
- b. Non recursive
- c. LL(1) Parser ✔
- d. Predictive Parse ✔

Your answer is correct.

The correct answers are: Predictive Parse, LL(1) Parser

Question **5**

Correct

Mark 1.00 out of 1.00

Flag question

What is the first() of " P " of the given grammar?

S-> PCD

P->ACD

A->d|^

C-> f

D->a

Select one:

- a. d,f
- b. d
- c. A
- d. d,^ ✔

Your answer is correct.

The correct answer is: d,^

Question **3**

Incorrect

Mark 0.00 out of 1.00

Flag question

stack hold the following:

Stack: &, id, +, id & arrow point out last & within the stack.
Word : id + id * id & arrow point out * sign

Which one operation will be performed in the stack? select the right option

Select one:

- a. before * all will be POP
- b. POP
- c. PUSH ✖
- d. After * all will be PUSH

Your answer is incorrect.

The correct answer is: before * all will be POP

Question **2**

Correct

Mark 1.00 out of 1.00

Flag question

What is a CFG of a^n b^n?

Select one:

- a. S->abS
- b. S=>aS|bS
- c. Not exist in options ✔
- d. S->aS|bS

Your answer is correct.

The correct answer is: Not exist in options

Question **1**

Correct

Mark 1.00 out of 1.00

Flag question

What is Follow () of the " T' " in given CFG?
E->E'T
E'->T+E'|^
T->FT'
T'->F*T'|^
F->id|(E)

Select one:

- a. +,*,&
- b. +,*
- c. None of these options ✔
- d. +,&,)

Your answer is correct.

The correct answer is: None of these options

Question **18**

Correct

Mark 1.00 out of 1.00

Flag question

Why we need first() and Follow() functions?

Select one:

- a. To construct Top down approach
- b. to construct RR
- c. To construct a parser table ✔
- d. Not valid question

Your answer is correct.

The correct answer is: To construct a parser table

Question **19**

Correct

Mark 1.00 out of 1.00

Flag question

rexp->rterm rexp'
rexp'->^|+rterm
rterm->rterm rfactor | rfactor
Is this grammar in Left factoring form?

Select one:

- True
- False ✔

The correct answer is 'False'.

Question **4**

Partially correct

Mark 0.50 out of 1.00

Flag question

Match the column:

Code generation	Register allocation ✔
Syntax analysis	Regular expression ✘
Lexical Analysis	Pushdown automata ✘
Code optimization phase	Analysis of flow ✔

Your answer is partially correct.

You have correctly selected 2.

The correct answer is:

Code generation

→ Register allocation,

Syntax analysis

→ Pushdown automata,

Lexical Analysis

→ Regular expression,

Code optimization phase

→ Analysis of flow