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State Finished

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Time taken 43 mins 9 secs

Grade 22.17 out of 30.00 (74%)

Question **1**

Correct

Mark 1.00 out of 1.00

What is significance to associate data type attribute to each Non-terminal ?

Select one:

- ☒ a. Both of these ✓
- ☐ b. To check program is semantically error free or not
- ☐ c. To check Programming construct is semantically error free or not

The correct answer is: Both of these

Question **2**

Correct

Mark 1.00 out of 1.00

Which of these is true about LR parsing?

Select one:

- ☐ a. It is still efficient
- ☐ b. None of the mentioned
- ☒ c. Is most general non-backtracking shift-reduce parsing and It is still efficient ✓
- ☐ d. Is most general non-backtracking shift-reduce parsing

The correct answer is: Is most general non-backtracking shift-reduce parsing and It is still efficient

Question **3**

Correct

Mark 1.00 out of 1.00

A form of recursive-descent parsing that does not require any back-tracking is known as?

Select one:

- ☐ a. non-predictive parsing
- ☐ b. recursive parsing
- ☐ c. non-recursive parsing.
- ☒ d. predictive parsing ✓

The correct answer is: predictive parsing

Question 4

Incorrect

Mark 0.00 out of 1.00

A \rightarrow XYZ {Y.S = A.S, Y.S = X.S, Y.S = Z.S} is example of :

Select one:

- ☒ a. L – Attributed SDT ✖
- ☐ b. S – Attributed SDT
- ☐ c. None
- ☐ d. Both S attributed and L Attributed

The correct answer is: None

Question 5

Correct

Mark 1.00 out of 1.00

In most programming languages the four arithmetic operators, addition, subtraction, multiplication, and division are left-associative.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question 6

Correct

Mark 1.00 out of 1.00

Which one of the following kinds of derivation is used by LR parsers?

Select one:

- ☒ a. Rightmost in reverse order ✔
- ☐ b. Leftmost in reverse order
- ☐ c. Rightmost
- ☐ d. Leftmost

The correct answer is: Rightmost in reverse order

Question 7

Correct

Mark 1.00 out of 1.00

Select the definition related to term.

Pattern	is a description of the form that the lexemes of a token may take.	✔
Lexeme	is a sequence of characters in the source program that matches the pattern for a token	✔
Token	is a pair consisting of a name and an optional attribute value.	✔

The correct answer is: Pattern \rightarrow is a description of the form that the lexemes of a token may take., Lexeme \rightarrow is a sequence of characters in the source program that matches the pattern for a token, Token \rightarrow is a pair consisting of a name and an optional attribute value.

Question **8**

Correct

Mark 1.00 out of 1.00

Which of the following grammar is LR(1)?

Select one:

- ☐ a. $A \rightarrow aAa, A \rightarrow aAb, A \rightarrow c$
- ☒ b. both (A) and (B) ✓
- ☐ c. $A \rightarrow aAb, A \rightarrow bAb, A \rightarrow ;a, A \rightarrow b$
- ☐ d. $A \rightarrow A+A, A \rightarrow a$

The correct answer is: both (A) and (B)

Question **9**

Incorrect

Mark 0.00 out of 1.00

A compiler is a program that can read a program in one language called as _____ and translate it into an equivalent program in another language.

Select one:

- ☒ a. machine language ✗
- ☐ b. source language
- ☐ c. target language

The correct answer is: source language

Question **10**

Correct

Mark 1.00 out of 1.00

Given the production rules of grammar

$G1 : \{ S1 \rightarrow AB|aaB ; A \rightarrow a|Aa ; B \rightarrow b \}$

$G2 : \{ S2 \rightarrow aS2bS2|bS2aS2|\lambda \}$

which of the following is correct statement?

Select one:

- ☐ a. G1 is ambiguous and G2 is not ambiguous
- ☐ b. G1 is not ambiguous and G2 is ambiguous
- ☐ c. G1 is not ambiguous and G2 is not ambiguous
- ☒ d. G1 is ambiguous and G2 is ambiguous ✓

The correct answer is: G1 is ambiguous and G2 is ambiguous

Question 11

Correct

Mark 1.00 out of 1.00

Consider the following grammar :

$P \rightarrow xQRS$

$Q \rightarrow yz / z$

$R \rightarrow W / \epsilon$

$S \rightarrow y$

What is Follow(Q) ?

Select one:

- ☐ a. {W}
- ☐ b. {w,\$}
- ☒ c. {w,y} ✓
- ☐ d. {R}

The correct answer is: {w,y}

Question 12

Correct

Mark 1.00 out of 1.00

In a string of length n, how many of the following are there?

Prefixes	<input type="text" value="n+1"/>	✓
Proper prefixes	<input type="text" value="n-1"/>	✓
Suffixes	<input type="text" value="n+1"/>	✓

The correct answer is: Prefixes $\rightarrow n+1$, Proper prefixes $\rightarrow n-1$, Suffixes $\rightarrow n+1$

Question 13

Incorrect

Mark 0.00 out of 1.00

Which of the following is/are the characteristics of peephole optimization?

Select one:

- ☐ a. Flow-of-control optimizations
- ☐ b. Algebraic simplifications
- ☒ c. Redundant-Instruction elimination ✗
- ☐ d. All of the these

The correct answer is: All of the these

Question **14**

Incorrect

Mark 0.00 out of 1.00

Check whether the following grammar is LL(1) or not?

$S \rightarrow aAbA/Ba$

$B \rightarrow b/\epsilon$

$A \rightarrow aBb/\epsilon$

Select one:

- ☒ a. Not LL(1) ✖
- ☐ b. it is LR(1)
- ☐ c. Yes it is LL(1)
- ☐ d. Cant Decide

The correct answer is: Yes it is LL(1)

Question **15**

Correct

Mark 1.00 out of 1.00

In an implementation, activities from several phases may be grouped together into a pass that reads an input file and writes an output file.

Select one:

- ☒ True ✔
- ☐ False

The correct answer is 'True'.

Question **16**

Correct

Mark 1.00 out of 1.00

suppose a source program contains the assignment statement `position = initial + rate * 60` then

Select one:

- ☒ a. position is a lexeme ✔
- ☐ b. none
- ☐ c. position is a pattern
- ☐ d. position is a token

The correct answer is: position is a lexeme

Question **17**

Partially correct

Mark 0.50 out of 1.00

Map appropriate Type Equivalence

C language considers two types are same if

They satisfy both Name Equivalence and Structural Equivalence

✖

Pascal language considers two types are same if

type name refers for them are same

✔

The correct answer is: C language considers two types are same if \rightarrow they are structurally identical, Pascal language considers two types are same if \rightarrow type name refers for them are same

Question **18**

Correct

Mark 1.00 out of 1.00

A bottom-up parser generates

Select one:

- ☐ a. Left-most derivation in reverse
- ☒ b. Right-most derivation in reverse ✓
- ☐ c. Right –most derivation
- ☐ d. Left-most derivation

The correct answer is: Right-most derivation in reverse

Question **19**

Correct

Mark 1.00 out of 1.00

Which type of conflicts can occur in LR Parsing?

Select one or more:

- ☒ a. Shift - Reduce ✓
- ☐ b. Shift - Shift
- ☒ c. Reduce - Reduce ✓

The correct answers are: Shift - Reduce, Reduce - Reduce

Question **20**

Correct

Mark 1.00 out of 1.00

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 set of rules:

$\{ S \rightarrow iCtSS1|a ;$

$S1 \rightarrow eS|\text{null} ;$

$C \rightarrow b \}$

The grammar is $LL(1)$, True / False

Select one:

- ☐ a. The Grammar left recursive
- ☐ b. The Grammar is not $LL(1)$
- ☐ c. The grammar is $LL(1)$
- ☒ d. The grammar is ambiguous ✓

The correct answers are: The Grammar is not $LL(1)$, The grammar is ambiguous

Question **21**

Incorrect

Mark 0.00 out of 1.00

What are possible form of input to Code Generation phase

Select one:

- ☐ a. Postfix Notation
- ☐ b. Any of these
- ☐ c. Abstract Syntax Tree
- ☒ d. Three Address Code ✗

The correct answer is: Any of these

Question **22**

Partially correct

Mark 0.67 out of 1.00

Which parsers have same number of states for same Grammar?

Select one or more:

- ☒ a. SLR ✓
- ☐ b. LR(0)
- ☐ c. LR(1)
- ☒ d. LALR ✓

The correct answers are: LR(0), SLR, LALR

Question **23**

Incorrect

Mark 0.00 out of 1.00

What is cost(Number of Byte Access in digit) of Instruction '**INC a**' ?

Answer: ✗

The correct answer is: 2

Question **24**

Correct

Mark 1.00 out of 1.00

One of the purposes of using intermediate code in compilers is to

Select one:

- ☒ a. increase the chances of reusing the machine-independent code optimizer in other compilers. ✓
- ☐ b. improve the register allocation.
- ☐ c. improve error recovery and error reporting.
- ☐ d. make parsing and semantic analysis simpler.

The correct answer is: increase the chances of reusing the machine-independent code optimizer in other compilers.

Question **25**

Correct

Mark 1.00 out of 1.00

which of the following statements are leaders?

- 1) **i = 1;**
- 2) **j = 1;**
- 3) **t1 = 10*j;**
- 4) **t2 = t1*j;**
- 5) **if j <= 10 goto (3)**
- 6) **i=i+1;**
- 7)

Select one:

- ☐ a. 1,2,3,6
- ☐ b. 1,3,5,6
- ☐ c. 1,2,3,4,5,6,7
- ☒ d. 1,3,6 ✓

The correct answer is: 1,3,6

Question **26**

Correct

Mark 1.00 out of 1.00

Synthesized attribute is an attribute whose value at a parse tree node depends on?

Select one:

- ☐ a. None
- ☐ b. Attributes at present node only
- ☐ c. Attributes at siblings only
- ☒ d. Attributes at children only ✓

The correct answer is: Attributes at children only

Question **27**

Correct

Mark 1.00 out of 1.00

The bottom-up parsing method is also called

Select one:

- ☐ a. Predictive parsing
- ☐ b. Recursive descent parsing
- ☒ c. Shift reduce parsing ✓
- ☐ d. None of these

The correct answer is: Shift reduce parsing

Question **28**

Correct

Mark 1.00 out of 1.00

In LL(K) is written then what is second L indicate :

Select one:

- ☐ a. Left recursion
- ☒ b. Left most derivation ✓
- ☐ c. Left to right scanning of input tape
- ☐ d. Look ahead

The correct answer is: Left most derivation

Question **29**

Correct

Mark 1.00 out of 1.00

In which parsing, the parser constructs the parse tree from the start symbol and transforms it into the input symbol.

Select one:

- ☐ a. None of the these
- ☒ b. Top-down parsing ✓
- ☐ c. Bottom-up parsing
- ☐ d. Bottom up and Top down

The correct answer is: Top-down parsing

Question **30**

Incorrect

Mark 0.00 out of
1.00

Following grammar $\text{string} \rightarrow \text{string} + \text{string} \mid \text{string} - \text{string} \mid 0 \mid 1 \mid 2 \mid 3 \mid 4 \mid 5 \mid 6 \mid 7 \mid 8 \mid 9$ is unambiguous grammar.

Select one:

☒ True 

☐ False

The correct answer is 'False'.

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