# CS606- COMPILER CONSTRUCTION
## (SOLVED MCQs)
## FROM MIDTERM PAPERS
## LECTURE (1-22)

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**Question No 1**

LL(1) parsing is called _____ parsing.

- **Predictive**
- Non-predictive
- Post-predictive
- Post determine

**Question No 2**

One kind of predictive parser is the _____.

- **Recursive descent parses**
- Bottom-up parser
- Natural parser
- Multilingual parser

**Question No 3**

Front-end of a two pass compiler consists of _____.

- Code optimizer
- **Scanner**
- Parser
- Assembler

Question No 4

The algorithm for _____ conversion is called Thompson's Construction.

- DFA to RE
- **RE to DFA**
- RE to NFA
- CFG to NFA

**Question No 5**

_____ convert the relocatable machine into absolute machine code by linking library and relocatable object files.

- Assembler
- **Loader/link editor**
- Compiler
- Preprocessor

**Question No 6**

The _____ parser uses a stack to hold the frontier.

- Top-down
- **Bottom-up**
- Predicative
- LL(1) parsers

**Question No 7**

_____ is the process of discovering a derivation for some sentence of a language.

- Compiling
- Scanning
- **Parsing**
- Interpretation

**Question No 8**

A _____ accepts a string if we can follow transitions labeled with characters in the string from start state to some accepting state.

- **Finite automata……(For More Visit)**
- Regular expression

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- Regular language
- Acceptor

**Question No 9**

The general idea behind NFA-to-DFA construction is that each _____ state corresponds to a set of _____ states.

- **DFA, NFA**
- NFA, DFA
- NFA, FA
- CFG, NFA

**Question No 10**

Optimal registers allocation is _____ problem.

- NP-hard
- **NP-complete**
- Polynomial complete
- Multinomial complete

**Question No 11**

Majority of the algorithms employed in the back-end are _____.

- Polynomial time
- NP-Complete
- **Np**
- None of the given

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**Question No 12**

In predictive parsing table, the rows are _____.

- **Non-terminals**
- Terminals

- Both non-terminals and terminals
- Neither non-terminals nor terminals

**Question No 13**

Predictive parser accepts _____ grammars.

- LL(n+)
- LL(j-)
- **LL(k)**
- LL(K++)

**Question No 14**

_____ and _____ actions are used by bottom-up parsing.

- Break and reduce
- Shift and break
- **Shift and reduce**
- Shift and expand

**Question No 15**

If the right-hand side of a production has k symbols, it has _____ placeholder positions.

- k
- **k+1**
- k+2
- k+3

**Question No 16**

Lexical analyzer function is not _____.

- Removing white space
- Removing constants, identifies and keywords
- **Removing comments**

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- Register allocation

**Question No 17**

Reduce action _____ zero or more symbols from the stack.

- Pushes
- Pops
- **Both pushes and pops**
- Adds

**Question No 18**

Parser determines if the input is _____ well formed.

- Programmatically
- Logically
- **Syntactically**
- Mechanically

**Question No 19**

Grammar with the _____ property is called predictive grammar.

- LL(3)
- LL(2)
- **LL(1)**
- LL(n+)

**Question No 20**

The executable code typically runs as a _____ in an Operating System Environment.

- **Process**
- Threads
- Routine
- Function

**Question No 21**

In a transition table cells of the table contain the _____ state.

- Reject State
- **Next State**
- Previous State
- Same State

**Question No 22**

In parser the two LL stand(s) for _____.

- Left-to-right scan of input
- Left-most derivation
- **Left-to-right scan of input and left-most derivation**
- Right to left scan of input

**Question No 23**

The _____ builds intermediate Representation (IR) for source program.

- Scanner
- **Parser**
- Compiler
- Loader

**Question No 24**

Left factoring of a grammer is done to save the parser from _____.

- Location tracking
- **Front tracking**
- Back tracking
- Random tracking

**Question No 25**

In Flex specification file different sections are separated by _____.

- **%%**
- &&
- ##
- \\

**Question No 26**

Left factoring of a grammar is done to save the parser from _____.

- Location tracking
- Front tracking
- **Back tracking**
- Random tracking

**Question No 27**

Lexer and scanner are _____ phase of compiler.

- **Same**
- Different
- Backend
- Middle end

Question No 28

Back End of two-pass compiler uses _____ algorithm.

- O(n)
- (n log n)
- **NP Complete**
- O(n2)

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**Question No 29**

The _____ contains a lot of unneeded information.

- **Parse tree**
- Abstract syntax tree
- Complete tree
- Abstract syntax tree

**Question No 30**

A _____ start at the leaves and grows toward root of the parse tree.

- Top-down parser
- **Bottom-up parser**
- Vertical parser
- Horizontal parser

**Question No 31**

Typical compilation means programs written in high-level languages to low-level _____.

- **Object code PG # 06**
- Byted code
- Unicode
- Object Code and byte code

**Question No 32**

In compilation process, Hierarchical analysis is also called _____.

- Parsing
- **Syntax**
- Parsing and Syntax analysis o

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- None of given

**Question No 33**

IR (Intermediate Representation) stores the value of its operand in _____.

- **Registers PG # 10**
- Memory
- Hard disk
- None Of given

**Question No 34**

A lexeme is a sequence of characters in the source program that is matched by the pattern for a _____.

- Linker
- **Token**
- Control flow
- None of given

**Question No 35**

Parsers take _____ as Input from lexical analyzer.

- Linker
- **Token**
- Instructions
- None of the given

**Question No 36**

What kind of abstract machine can recognize strings in a regular set?

- **DFA**
- NFA
- PDA

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- None of the given

**Question No 37**

In multi pass compiler, during the first pass it gathers information about _____.

- **Declaration**
- Bindings
- Static information
- None of the given

**Question No 38**

In DFA minimization, we construct one _____ for each group of states from the initial DFA.

- **State PG # 30**
- NFA
- PDA
- None of given

**Question No 39**

_____(Lexical Analyzer generator), is written in Java..

- Flex
- **Jlex PG # 31**
- Complex
- None of given

**Question No 40**

Recursive _____ parsing is done for LL(I) grammar.

- **Decent**
- Ascent
- Forward

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- None of the given

**Question No 41**

Alternative of the backtrack in parser is Look ahead symbol in _____.

- **Input**
- Output
- Input and Output
- None of the given

**Question No 42**

Parser takes tokens from scanner and tries to generate _____.

- Binary Search tree
- **Parse tree**
- Binary Search tree and Parse tree
- None of the given

**Question No 43**

In predictive parsing table, the rows represents _____.

- Terminals
- Both non-terminal and terminals
- **Non-terminals PG # 62**
- None of the given

**Question No 44**

In LL(I) parsing algorithm,_____ contains a sequence of grammar symbols.

- **Stack PG # 62**
- Link List
- Array
- None of the given

**Question No 45**

Consider the grammar

A ⟹ B C D

B ⟹ h B | £

C ⟹ C g | g | C h | i

D ⟹ AB | £

First of A is _____.

- **h, g, i**
- g
- h
- None of the given

**Question No 46**

Consider the grammar

A ⟹ B C D

B ⟹ h B | £

C ⟹ C g | g | C h | i

D ⟹ AB | £

First of C is _____.

- **g, i**
- g
- h, i
- None of the given

**Question No 47**

Bottom-up parsing uses only _____ kinds of actions.

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- **Two PG # 71**
- Three
- Four
- Five

**Question No 48**

The shift action _____ a terminal on the stack.

- **Pushes PG # 73**
- Pops
- Both push and pops
- None of the given

**Question No 49**

Reduce _____ action zero or more symbols from the stack.

- Pushes
- **Pops PG # 73**
- Both push and pops
- None of the given

**Question No 50**

In compilers, linear analysis is also called _____.

- Lexical analysis
- Scanning
- **Lexical analysis and scanning**
- None of the given

**Question No 51**

Back End of two-pass compiler uses _____ algorithm.

- O(n)
- O(n log n)

- **NP Complete**
- None of the Given

**Question No 52**

The Back End of a compiler consist of _____.

- **Instruction selection**
- Register allocation
- Instruction scheduling
- All of the given

**Question No 53**

In Back End module of compiler, optimal register allocation uses _____.

- O(log n)
- O(n log n)
- **NP-Complete**
- None of the given

**Question No 54**

._____is a regular expression for the set of all strings over the alphabet {a} that has an even number of a' s.

- **(aa)***
- (aa)*a
- aa*a
- a*(aa)

**Question No 55**

_____algorithm is used in DFA minimization.

- James's
- Robert’s

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- **Hopcroft's PG # 25**
- None of given

**Question No 56**

_____ is an important component of semantic analysis.

- Code checking
- **Type checking PG # 39**
- Flush checking
- None of the given

**Question No 57**

Consider the grammar

A ⟹ B C D

B ⟹ h B | £

C ⟹ C g | g | C h | i

First of B is_____.

- h, i
- **h, £**
- g
- None of the given

**Question No 58**

Consider the grammar,

A ⟹ B C D

B ⟹ h B | £

C ⟹ C g | g | C h | i

D ⟹ AB | £

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First of D is_____.

- h, g
- h
- **h, g , i, £**
- None of the given

**Question No 59**

_____ Parsers never shifts into an error state.

- LS
- LT
- **LR**
- LP

**Question No 60**

In_____ , certain checks are performed to ensure that components of a program fit together meaningfully..

- Linear analysis
- Hierarchical analysis
- **Semantic analysis**
- None of given

**Question No 61**

_____ read the input character and produce sequence of tokens as output.

- **Lexical analyzer**
- Parser
- Symbol table
- None of the given

**Question No 62**

. The regular expression _____denotes, the set of all strings of a's and b's of length two.

- a*
- (a* | b*)*
- (a*b*)*
- **(a|b)(a|b)**

**Question No 63**

_____ of a two-pass compiler is consists of Instruction selection, Register allocation and Instruction scheduling.

- **Backend PG # 9**
- Frontend
- Start
- None of the Given

**Question No 64**

_____ is evaluated to yield a value.

- Command
- **Expression**
- Declaration
- None of the given

**Question No 65**

Bottom-up parsers handle a _____ class of grammar.

- **Large PG # 49**
- Small
- Medium
- None of the given

**Question No 66**

The input specification file to flax consists of-------- section.

- 1
- 2
- **3**
- 4

**Question No 67**

Lexer and scanner are two different phases of compiler.

- True
- **False**

**Question No 68**

In compiler linear analysis is also called.

- Lexical analysis
- Scanning
- **Both lexical analysis and scanning**
- None of the given

**Question No 69**

Which of the following statements is NOT true?

- The language accepted by finite automate are the languages denoted by regular expression.
- For every DFA there is a regular expression denoting its languages.
- **For a regular expression r, there does not exit NFA with L(r) any transit that accept.**
- None of the given.

**Question No 70**

Top – down parsing expands a ---------- from the start symbol to the leaves.

- Parse tree
- Abstract Syntax tree
- Parse tree
- **All of the given**

**Question No 71**

A top-down purser starts with the ---------- of the parse tree.

- **Root**
- Leaf
- Middle
- None of the given

**Question No 72**

Can a DFA simulate NFA?

- NO
- **YES**
- Sometimes
- Depends on NFA

**Question No 73**

Bottom- up parsing is also called----------.

- **LR parsing**
- LT parsing
- LS parsing
- SS parsing

**Question No 74**

The ---------- is optimized for hardware it is to run on.

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- C++ code
- C code
- **Assembly code**
- None of the given

**Question No 75**

Abstract syntax tree summarizes ---------- without the details of derivation.

- Theory
- **Grammatical structure**
- Data
- None of the give

**Question No 76**

LR parsing---------- a string to the start symbol by inverting production.

- **Reduces**
- Shifts
- Adds
- None of the given

**Question No 77**

Alternative to backtrack in top- down parser is ----------.

- Context free grammar
- Trees
- **Look ahead**
- None of the given

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**Question No 78**

Typical compilation means programs written in high- level languages to low- languages----------.

- **Object code**

- Byte Code
- Unicode
- Both object code and Byte code

**Question No 79**

The ---------- Checks the stream of work (token) and their parts of speech for grammatical correctness.

- Parser
- **Scanner**
- **Compiler**
- None of the given

**Question No 80**

A grammar must be ---------- before use for predicative parsing.

- Right factored
- **Left factored**
- Factored
- None of the given

**Question No 80**

Parser does not distinguish between valid and invalid sequences of token.

- True
- **False**

**Question No 81**

In Compilation process Hierarchical analysis is also called:

- Parsing
- **Syntax analysis**
- Both parsing and Syntax analysis

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- None of the given

**Question No 82**

The pair <role, word> is given the name----------.

- Word
- **Token**
- Syntax
- None of the given

**Question No 83**

The back end maps intermediate Representation (IR) into target----------.

- Object code
- Machine code
- **Source code**
- Linker

**Question No 84**

---------- is evaluated to yield a value.

- Command
- **Expression**
- Declaration
- Declaration and Command

**Question No 85**

Front- end of a two pass compiler is consists of scanner.

- **TRUE**
- FALSE

**Question No 86**

The ---------- returns a sequence of mating token at output (or an error) and it always return the longest matching token.

- Scanner
- Lexer
- **Lexical analyzer**
- All of the given

**Question No 87**

---------- avoid hardware stalls and interlocks.

- Register allocation
- **Instruction scheduling**
- Instruction selection
- None of given

**Question No 88**

LR parsers can handle _____ grammars.

- Left-recursive (Page 63)
- file-recursive
- End-recursive
- Start-recursive

**Question No 89**

_____ convert the relocatable machine code into absolute machine code by linking library and relocatable object files.

- Assembler
- Loader/link-editor
- Compiler
- Preprocessor

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**Question No 90**

Follow of C is _____ .

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

**Question No 91**

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 _____.

- **h**
- g, h, i, $
- g, i
- g

**Question No 92**

An important component of semantic analysis is _____.

- Code checking
- **type checking (Page 33)**
- flush checking
- None of the given

**Question No 93**

In PASCAL _____ represent the inequality test.

- :=
- =
- <>
- None of the given

**Question No 94**

Lexical Analyzer generator _____ is written in Java.

- Flex
- **Jlex (Page 26)**
- Complex
- None of given

**Question No 95**

_____avoid hardware stalls and interlocks.

- Register allocation
- **Instruction scheduling (Page 121)**
- Instruction selection
- None of given

**Question No 96**

**Consider the following grammar,**

**A --> B C D**

**B --> h B | epsilon**

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

**D --> A B | epsilon**

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**First of A is _____.**

- h, g, i
- g
- **h**
- None of the given

**Question No 97**

Recursive _____ parsing is done for LL(1) grammar.

- **Descent (Page 47)**
- Ascent
- Forward
- Backward

**Question No 98**

One of the core tasks of compiler is to generate fast and compact executable code.

- **True**
- False

**Question No 99**

Left factoring of a grammar is done to save the parser from back tracking.

- **True**
- False

**Question No 100**

Responsibility of _____ is to produce fast and compact code.

- **Instruction selection (Page 9)**
- Register allocation
- Instruction scheduling
- None of given

**Question No 101**

_____ algorithm is used in DFA minimization.

- James's
- Robert's
- **Hopcroft's (Page 25)**
- None of given

**Question No 102**

Compilers are sometimes classified as.

- Single pass
- Multi pass
- Load and go
- **All of the given**

**Question No 103**

In multi pass compiler during the first pass it gathers information about _____.

- **Declaration**
- Bindings
- Static information
- None of the given

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**Question No 104**

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

- True
- **False (Page 26)**

**Question No 105**

In compilation process Hierarchical analysis is also called

- Parsing
- Syntax analysis
- **Both Parsing and Syntax analysis**
- None of given

**Question No 106**

For each language to make LL(1) grammar, we take two steps, 1st is removing left recurrence and 2nd is applying left factoring in sequence.

- **True**
- False

**Question No 107**

_____is evaluated to yield a value.

- Command
- **Expression**
- Declaration
- Declaration and Command

**Question No 108**

Optimal registers allocation is an NP-hard problem.

- True
- **False**

**Question No 109**

Parser takes tokens from scanner and tries to generate _____ .

- Binary Search tree
- **Parse tree**
- Syntax trace
- None of the given

**Question No 110**

Front end of two pass compiler takes_____ as input.

- **Source code (Page 5)**
- Intermediate Representation (IR)
- Machine Code
- None of the Given

**Question No 111**

In in we construct one _____ for each group of states from the initial DFA.

- **State (Page 25)**
- NFA
- PDA
- None of given

**Question No 112**

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

- Front End
- **Middle End (Page 10)**
- Back End
- Both Front end and Back end

**Question No 113**

_____ of a two-pass compiler is consists of Instruction selection, Register allocation and Instruction scheduling.

- **Back end (Page 10)**
- Front end
- Start
- None of given

**Question No 114**

NFA is easy to implement as compared to DFA.

- True
- **False (Page 19)**

**Question No 115**

We can get an LL(1) grammar by _____ .

- Removing left recurrence
- Applying left factoring
- **Removing left recurrence and Applying left factoring**
- None of the given

**Question No 116**

Parser always gives a tree like structure as output

- True
- False

**Question No 117**

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

- O(log n)

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- O(n log n)
- **N P-Complete (Page 10)**
- None of the given

**Question No 118**

Lexer and scanner are two different phases of compiler
Select correct option:

- True
- **False**

**Question No 119**

In Flex specification file different sections are separated by _____.

- **%% (Page 26)**
- &&
- ##
- \\

**Question No 120**

_____ phase which supports macro substitution and conditional compilation.

- Semantic
- Syntax
- **Preprocessing** Click here for detail
- None of give

**Question No 121**

_____tree in which each node represents an operator and children of the node represent the operands.

- **Abstract syntax (Page 100)**
- Concrete syntax

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- Parse
- None of the given

**Question No 122**

In _____certain checks are performed to ensure that components of a program fit together meaningfully.

- Linear analysis
- Hierarchical analysis
- **Semantic analysis (Page 33)**
- None of given

**Question No 123**

In compiler linear analysis is also called.
Select correct option:

- Lexical analysis
- Scanning
- **Both lexical analysis and scanning click here for details**
- None of the given

**Question No 124**

Which of the following statement is true about Two pass compiler.

- Front End depends upon Back End
- **Back End depends upon Frond End (Page 5)**
- Both are independent of each other
- None of the given

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**Question No 125**

Ambiguity can easily be handled by Top-down Parser

- **True click here for detail**
- False

**Question No 126**

Alternative of the backtrack in parser is Look ahead symbol in _____ .

- **Input (Page 46)**
- Output
- Input and Output
- None of the given

**Question No 127**

Typical compilation means programs written in high-level languages to low-level _____.

- Object code
- Byte code
- Unicode
- **Both Object Code and byte code (Page 2)**

**Question No 128**

LR parsing _____ a string to the start symbol by inverting.

- **Reduces (Page 63)**
- Shifts
- Adds
- None of the given

**Question No 129**

In parser the two LL stand(s) for _____.

- Left-to-right scan of input
- left-most derivation
- **All of the given click here for detail**
- **None of given**

**Question No 130**

Bottom-up parsers handle a _____ class of grammars.

- **Large (Page 63)**

- Small
- Medium
- None of the given

**Question No 131**

Compilers are some times classified as.

- Single pass
- Multi pass
- Load and go
- **All of the given**

**Question No 132**

The Back End of a compiler consist of _____ .

- **Instruction selection** (Page 10)
- Register allocation
- Instruction scheduling
- All of the given

**Question No 133**

Can a DFA simulate NFA?

- **Yes** click here for detail
- No
- Sometimes
- Depend upon nfa

**Question No 134**

Which of the statement is true about Regular Languages?

- Regular Languages are the most popular for specifying tokens.
- Regular Languages are based on simple and useful theory.
- Regular Languages are easy to understand.

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- **All of the given (Page 15)**

**Question no 135**

In a transition table cells of the table contain the _____ state.

- Reject state
- **Next state (Page 18)**
- Previous state
- None of the given

**Question No 136**

The transition graph for an NFA that recognizes the language ( a | b)*abb will have following set of states.

- {0}
- {0,1}
- {0,1,2}
- **{0,1,2,3} (page 23) Not sure**

**Question No 137**

Functions of Lexical analyzer are?

- Removing white space
- Removing constants, identifiers and keywords
- Removing comments
- **All of the given** click here for detail

**Question No 138**

_____ method is known as Subset Construction Method.

- **NFA TO DFA (Page 19)**
- DFA
- DFA maximization
- None of given

**Question No 139**

Which one is NOT the Role of Run-Time System

- garbage collection
- memory management
- run time error checking
- **none of given (Page 11)**

**Question No 140**

Compiler_____ information from one representation to another

- modified
- **translate (Page 2)**
- execute
- extract

**Question No 141**

Front-end of a two pass compiler is consists of Scanner.

- True
- **False (Page 12)**

**Question No 142**

Bottom-up parsing uses only _____ kinds of actions.

- **Two (Page 64)**
- Three
- Four
- Five

**Question No 143**

Bottom-up parsing is also called _____ .

- **LR parsing (Page 63)**
- LT parsing
- LS parsing

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- SS parsing

**Question No 144**

Backtracking is a costly operation which is caused due to Left Recursion.

- True
- **False**

**Question No 145**

A non-recursive predictive parser is also called _____.

- **table-driven parser (Page 54)**
- Abstract parser
- Conceptual parser
- None of the given

**Question No 146**

AST summarizes the grammatical structure with the details of derivations.

- True
- **False (Page 8)**

**Question No 147**

Backtrack is term associated with Top-down parsing.

- **True (Page 42)**
- False

Which of the following statement is true about Two-pass compiler.

- Front End depends upon Back End
- Back End depends upon Front End
- Both are independent of each other
- None

2. In a three-pass compiler, ___ is used for code improvement or optimization.

- Front End
- Middle End
- Back End
- Both Front End and Back End

3. In multi-pass compiler during the first pass, it gathers information about ___

- Declaration
- Bindings
- Static information
- None

4. Which of the statement is true about Regular Languages?

- Regular Languages are the most popular for specifying tokens.
- Regular Languages are based on simple and useful theory.
- Regular Languages are easy to understand
- All of the given

5. The DFA uses its state to keep track of ___ the NFA can be in after reading each input symbol.

- Accept state
- Reject state
- Next state
- All possible states

6. In ___ certain check are performed to ensure that components of a program fit together meaningfully.

- Linear analysis
- Hierarchical analysis
- Semantic analysis
- None

7. Compilers are some times classifies as:

- Single-pass
- Multipass
- Load and go
- All of the given

8. In compiler, linear analysis is also called

- Lexical analysis
- Scanning
- Both lexical analysis and scanning
- None

9. In a transition table cells of the table contain the ___ state.

- Reject state
- Next state
- Previous state
- None

10. In Back End module of the compiler, optimal register allocation uses ___.

- O(log n)
- O(n log n)
- NP-Complete
- None

11. A non-recursive predictive parser is also called ___

- table-driven parser
- Abstract parser
- Conceptual parser
- None

12. The shift action ___ a terminal on the stack

- Pushes
- Pops

- Both pushes and pops
- None

13. Bottom-up parsing is also called ___

- LR parsing
- LT parsing
- LS parsing
- SS parsing

14. ___ of a two-pass compiler is consists of instruction selection, Register allocation and instrcution scheduling

- Backend
- Frontend
- Start
- None

15. Consider the grammar
A -> B C C
B -> h B | epsilon
C -> C g | g | C h | i
D -> A B | epsilon
First of A is ___

- h, g, i
- g
- h
- None

16. A -> B C C
B -> h B | epsilon
C -> C g | g | C h | i

D -> A B | epsilon
Follow of A ___

- h, $
- $

- i
- g

17. A -> B C C
B -> h B | epsilon
C -> C g | g | C h | i
D -> A B | epsilon
Follow of C is ___

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

18. Left factoring of grammar is done to save the parser from backtracking.

- True
- False

19. Typical compilation means programs written in high-level languages to low-level ___

- Object code
- Byte code
- Unicode
- Object code and byte code

20. In compilation process, Hierarchical analysis is also called ___

- Parsing
- Syntax
- Parsing and Syntax analysis
- None

21. IR (Intermediate Representation) stores the value of its operand in ___

- Registers
- Memory
- Hard disk
- None

22. A lexeme is a sequence of characters in the source program that is matched by the pattern for a ___
- Linker
- Token
- Control flow
- None

23. Parsers take ___ as Input from lexical analyzer.
- Linker
- Token
- Instructions
- None

24. What kind of abstract machine can recognize strings in a regular set?
- DFA
- NFA
- PDA
- None

25. In DFA minimization, we construct one ___ for each group of states from the initial DFA.
- State
- NFA
- PDA
- None

26. ___ (lexical Analyzer generator), is written in Java
- Flex
- Jlex
- Complex
- None

27. In flex specification file, different sections are separated by ___
- %%
- &&
- ##
- None

28. Recursive ___ parsing is done for LL(I) grammar.
- Descent y

- Ascent
- Forward
- None

29. Alternative of the backtrack in parser is Look ahead symbol in ___

- Input
- Output
- Input and Output
- None

30. Parser takes tokens from scanner and tries to generate ___

- Binary Search Tree
- Parse tree
- Binary Search and Parse tree
- None

31. In predictive parsing table, the rows represents ___

- Terminals
- Both non-terminals and terminals
- Non-terminals
- None

32. In LL(I) parsing algorithm, ___ contains a sequence of grammar symbols.

- Stack
- Link list
- Array
- None

33. Consider the grammar

A -> B C D
B -> h B | epsilon
C -> C g | g | C h | i
D -> A B | epsilon

First of C is ___

- g, i
- g
- h, i
- None

34. Bottom-up parsing uses only ___ kinds of actions.

- Two

- Three
- Four
- Five

35. Reduce ___ action zero or more symbols from the stack.

- Pushes
- Pops
- Both push and pops
- None

36. Back End of two-pass compiler uses ___ algorithm

- O(n)
- O(n log n)
- NP complete
- None

37. The Back End of a compiler consists of ___

- Instruction selection
- Register allocation
- Instruction scheduling
- All of given

38. ___ is a regular expression for the set of all strings over the alphabet {a} that has an even number of a's

- aa*
- (aa)*
- aa*a
- a(aa)*

39. ___ algorithm is used in DFA minimization.

- Jame's
- Robert's
- Hopcroft's y
- None

40. ___ is an important component of semantic analysis.

- Code checking
- Type checking
- Flush checking
- None

41. Consider the grammar

A – > B C D
B -> h B | epsilon
C -> C g | g | C h | i
First of B is ___

- h, i
- h, epsilon
- g
- None

42. Consider the grammar
A -> B C D
B -> h B | epsilon
C -> C g | g | C h | i
D -> A B | epsilon
First of D is ___

- h, g
- h
- h, g, i, epsilon
- None

43. ___ parsers never shifts into an error state.

- LS
- LT
- LR
- LP

44. ___ read the input character and produce sequence of tokens as output.

- Lexical analyzer
- Parser
- Symbol table
- None

45. The regular expression ___ denotes, the set of all strings of a's and b's of length two.

- a*
- (a*| b*)*
- (a*b*)*
- (a|b)(a|b)

46. ___ is evaluated to yield a value.

- Command
- Expression
- Declaration
- None

47. Bottom-up parsers handle a ___ class of grammar

- Large
- Small
- Medium
- None

48. LR parsers can handle ___ grammars.

- Left-recursive
- File-recursive
- End-recursive
- Start-recursive

49. ___ convert the relocatable machine code into absolute machine code by linking library and relocatable object files.

- Assembler
- Loader/link-editor
- Compiler
- Preprocessor

50. 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 ___

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

51. In PASCAL ___represent the inequality test.

- :=
- =
- <>
- None

52. ___ avoid hardware stalls and interlocks.
- Register allocation
- Instruction scheduling
- Instruction selection
- None

53. One of the core tasks of compiler is to generate fast and compact executable code.
- True
- False

54. Responsibility of ___ is to produce fast and compact code.
- Instruction selection
- Register allocation
- Instruction scheduling
- None

55. Compilers are sometimes classified as
- Single pass
- Multi pass
- Load and go
- All of given

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

57. For each language to make LL(1) grammar, we take two steps, 1st is removing left recurrence and 2nd is applying left factoring in sequence.
- True
- False

58. Optimal registers allocation is an NP-hard problem.
- True
- False

59. Front end of two pass compiler takes ___ as input.
- Source code
- Intermediate Representation (IR)
- Machine code
- None

60. NFA is easy to implement as compared to DFA
- True
- False

61. We can get an LL(1) grammar by ___
- Removing left recurrence
- Applying left factoring
- Removing left recurrence and Applying left factoring
- None

63. Lexer and scanner are two different phases of compiler.
- True
- False

64. ___ phase which supports macro substitution and conditional compilation.
- Semantic
- Syntax
- Preprocessing
- None

65. ___ tree in which each node represents an operator and children of the node represent the operands
- Abstract syntax
- Concrete syntax
- Parse
- None

66. Ambiguity can easily be handled by top-down parser
- True
- False

67. LR parsing ___ a string to the start symbol by inverting productions.
- Reduces
- Shifts
- Adds
- None

68. In parser the two LL stand(s) for ___
- Left-to-right scan of input
- left-most derivation

- All of the given
- None

69. Can a DFA simulate NFA?

- Yes
- No
- Sometimes
- Depend upon NFA

70. The transition graph for an NFA that recognized the language (a|b)*abb will have following set of states.

- {0}
- {0, 1}
- {0, 1, 2}
- {0, 1, 2, 3}

71. Functions of Lexical analyzer are?

- Removing white space
- Removing constants, identifiers and keywords
- Removing comments
- All of given

72. ___ method is known as subset construction method.

- NFA to DFA
- DFA
- DFA maximization
- None

73. Which one is NOT the Role of Run-Time System?

- garbage collection
- memory management
- run time error checking
- None

74. Compiler ___ information from one representation to another.

- modified
- translate
- execute
- extract

75. Front-end of a two pass compiler is consists of scanner.

- True

- False

76. Backtracking is a costly operation which is caused due to Left Recursion.

- True
- False

77. AST summarizes the grammatical structure with the details of derivations.

- True
- False

78. Backtrack is term associated with Top-down parsing.

- True
- False

