

Class/Sem: VI/ Comp/CBCGS (CSC602)

Course Name: System Programming and Compiler Construction

- 1. Which of the following is designed to control the operations of a computer?
  - a) Application Software
  - b) System Software
  - c) Utility Software
  - d) User
- 2. Assembler is used as a translator for?
  - a) Low level language
  - b) High Level Language
  - c) COBOL
  - d) C
- 3. Assembler is a machine dependent, because of?
  - a. Argument list array(ALA)
  - b. Macro definition table(MDT)
  - c. Pseudo operation table(POT)
  - d. Mnemonics operation table(MOT)
- 4. Forward reference table(FRT) is arranged like
  - a. Stack
  - b. Queue
  - c. Linked list
  - d. Double linked list
- 5. The advantages of assembly level programming are
  - a) flexibility of programming is more
  - b) chances of error are less
  - c) debugging is easy
  - d) all of the mentioned

- 6. A/An \_\_\_\_\_instructs the assembler to perform certain actions during the assembly of program.
  - a. Statement format
  - b. Symbolic Operands
  - c. Assembler directive.
  - d. Data declaration
- 7. A macro is
  - a. a small program inside a program
  - b. set of special instructions
  - c. a unit of specification for program generation through expansion
  - d. Micro pre-processor statements
- 8. The translator which performs macro expansion?
  - a) Compiler
  - b) Micro processor
  - c) Utility software
  - d) Device drivers
- 9. A \_\_\_\_\_\_\_ statement declares the name of macro.
  - a. macro prototype
  - b. macro definition
  - c. macro identification
  - d. macro function
- 10. During macro expansion each statement is replaced by
  - a. the original program
  - b. the sequence of assembly statement
  - c. by specific symbols
  - d. None of the mentioned
- 11. When a computer is first turned on or restarted, a special type of absolute loader is executed called
  - a. " Compile and GO " loader
  - b. Boot loader
  - c. Boot strap loader
  - d. Relating loader

- 12. Disadvantage of " Compile and GO " loading scheme is that
  - a. a portion of memory is wasted because the case occupied by the assembler is unavailable to the object program
  - b. it is necessary to retranslate the users program and check every time it is run
  - c. it is very difficult to handle multiple segments, especially if the source programs are in different languages and to produce orderly modular programs
  - d. Compile and GO loading scheme is simple to implement.
- 13. The object code is produced directly in memory for immediate execution after assembly
  - in\_\_\_\_\_a) Absolute loader
  - b) Relocating Loader
  - c) Assemble-and-Go Loader
  - d) Bootstrap Loader

14. When a computer is first turned on or restarted a \_\_\_\_\_\_ executed.

- a) Absolute loader
- b) Relocating Loader
- c) Load and Go
- d) Bootstrap loaders
- 15. What is true for the compiler?
  - a) A compiler does a conversion line by line as the program is run.
  - b) A compiler converts the whole of a higher level program code into machine code in one step.
  - c) A compiler is general purpose language providing very efficient execution.
  - d) A compiler converts the whole of a low level program code into machine code in one step
- 16. A bottom up parser generates \_\_\_\_\_
  - a) Right most derivation
  - b) Rightmost derivation in reverse
  - c) Leftmost derivation
  - d) Leftmost derivation in reverse
- 17. A grammar that produces more than one parse tree for some sentence is called
  - a) Ambiguous
  - b) Unambiguous
  - c) Regular
  - d) Context sensitive grammar

- 18. Which of the following groups is/are token together into semantic structures?
  - a. Syntax analyzer
  - b. Intermediate code generation
  - c. Lexical analyzer
  - d. Semantic analyzer
- 19. What is the output of lexical analyzer?
  - a. A List of tokens
  - b. A Parse tree
  - c. Machine code
  - d. Intermediate code
- 20. A compiler for a high level language that runs on one machine and produce code for different machine is called
  - a. Optimizing compiler
  - b. One pass compiler
  - c. Cross compiler
  - d. Multi pass compiler
- 21. Intermediate code generation phase gets input from
  - a. Lexical analyzer
  - b. Syntax analyzer
  - c. Semantic analyzer
  - d. Code optimization
- 22. Which is from following is not an intermediate code form \_\_\_\_\_
  - a. Postfix notation
  - b. Syntax trees
  - c. Three address code
  - d. Affix notation
- 23. Pee Hole optimization is a \_\_\_\_\_
  - a) Loop Optimization
  - b) Local Optimization
  - c) Constant folding
  - d) Data Flow analysis
- 24. Local and loop optimization in turn provide motivation for
  - a. Data flow analysis
  - b. Constant folding
  - c. Pee hole optimization
  - d. DFA and constant folding

- 25. DAG representation of a basic block allows \_\_\_\_\_
  - a) Automatic detection of local common sub expressions
  - b) Detection of induction variables
  - c) Automatic detection of loop variant
  - d) Automatic correction of loop variant