

Program: BE Computer Engineering

Curriculum Scheme: Revised 2012

Examination: Third Year Semester VI

Course Code: CPC601 and Course Name: System Programming and Compiler Construction

Time: 1 hour

Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Macro' in an assembly level program is
Option A:	sub program
Option B:	a complete program
Option C:	a hardware portion
Option D:	relative coding
Q2.	In a two-pass assembler, the task of the Pass II is to
Option A:	Separate the symbol, mnemonic opcode and operand fields
Option B:	Build the symbol table
Option C:	Construct intermediate code
Option D:	Synthesize the target program
Q3.	Assume an instruction A AC,=F'5' What does '=' represent here?
Option A:	Data
Option B:	Literal
Option C:	Symbol
Option D:	Opcode
Q4.	The time required for execution of a macro is that of procedure
Option A:	less than
Option B:	equal to
Option C:	Greater than
Option D:	Greater than equal to
Q5.	Which of the following statements is incorrect?
Option A:	complete code of instruction string is inserted at each place, wherever the macro

	name appears
Option B:	macro requires less time of execution than that of procedure
Option C:	macro uses stack memory
Option D:	macro name can be anything except registers and mnemonics
Q6.	Which of the following must reside in memory under all situations
Option A:	Assembler
Option B:	Linker
Option C:	Loader
Option D:	Compiler
Q7.	Program that links several programs is called
Option A:	Linker
Option B:	Loader
Option C:	Translator
Option D:	Compiler
Q8.	A grammar that produces more than one parse tree for some sentence is
Option A:	Ambiguous
Option B:	Unambiguous
Option C:	Regular
Option D:	parser error
Q9.	The analysis part collects information about the source program and stores it in a data structure called a -----
Option A:	symbol table
Option B:	lexical analyser
Option C:	parsing table
Option D:	syntax analyser
Q10.	Three address code generations must contain
Option A:	Three address statements
Option B:	Three statements or less than it
Option C:	Three addresses
Option D:	Less than three addresses
Q11.	In the statement $x=op\ y$, op is a -----operator
Option A:	Binary
Option B:	Unary

Option C:	Normal
Option D:	Sequentially
Q12.	Identify the correct order of language processing activity
Option A:	Preprocessor→Compiler→Assembler→Linker→Loader
Option B:	Loader→ Preprocessor→Compiler→Assembler→Linker
Option C:	Loader→ Linker→ Preprocessor→Compiler→Assembler
Option D:	Assembler →Loader→ Linker→ Preprocessor→Compiler
Q13.	Which of the following is not a function of pass1 of an assembler?
Option A:	generate data
Option B:	keep track of LC
Option C:	remember literals
Option D:	remember values of symbols until pass 2
Q14.	Which of the following instructions is used to set the EV's(Expansion Time Variables)
Option A:	ANOP
Option B:	SET
Option C:	AIF
Option D:	AGO
Q15.	During macro expansion the macro call statement is replaced by a sequence of _____
Option A:	Machine code statements
Option B:	assembly statements
Option C:	Programming language statements
Option D:	program name
Q16.	Which of the following statements is true?
Option A:	SLR parser is more powerfull than LALR
Option B:	LALR parser is more powerful than canonical LR parser
Option C:	Canonical LR parser is more powerful than LALR parser
Option D:	The Parsers SLR, Canonical CR, and LALR have the same power
Q17.	The concept of Finite State Automata is much used in this part of the compiler
Option A:	lexical analysis
Option B:	Parser
Option C:	code generation
Option D:	code optimization
Q18.	Static memory allocation is typically performed during
Option A:	Compilation

Option B:	Execution
Option C:	Loading
Option D:	Linking
Q19.	Which of the following Pseudo code is used to indicate to the Assembler which General Register to use as a Base
Option A:	BALR
Option B:	USING
Option C:	BR
Option D:	START
Q20.	Code optimization is -----process
Option A:	Machine independent
Option B:	Machine dependent
Option C:	Program dependent
Option D:	Program independent
Q21.	Which of following is not a design issue related to code generation.
Option A:	Selection of most efficient instructions
Option B:	Deciding on a computation order
Option C:	Deciding which register to use
Option D:	Deciding which syntax use
Q22.	Consider following macro definition : MACRO &ARG0 VARY &COUNT, &ARG1, ARG2, &ARG3 &ARG0 ADD AREG, &ARG1 AIF(&COUNT EQ 1) .FINI ADD BREG, &ARG2 AIF(&COUNT EQ 2) .FINI What will be the expanded code for the instruction: L3 VARY 1, DATA
Option A:	ADD AREG, &ARG1
Option B:	ADD AREG, DATA
Option C:	L3 ADD AREG, &ARG1
Option D:	L3 ADD AREG, DATA
Q23.	Which table holds the names of all macros defined in the program ?
Option A:	Actual Parameter Table
Option B:	Macro Name Table
Option C:	Expansion Time Variable
Option D:	Macro definition Table

Q24.	Type checking is normally done during
Option A:	Lexical analysis
Option B:	Syntax analysis
Option C:	Syntax directed translation
Option D:	Code optimization
Q25.	The number of tokens the following C statement is <code>printf("i = %d, &I = %x", i,&i);</code>
Option A:	3
Option B:	26
Option C:	10
Option D:	21