

Q1: $(a+b)(cd)^*(a+b)$ denotes the following set

1. $\{a(cd)^nb \mid n \geq 1\}$

2. $\{a(cd)^n \mid n \geq 1\} \cup \{b(cd)^n \mid n \geq 1\}$

3. $\{a(cd)^na \mid n \geq 0\} \cup \{a(cd)^nb \mid n \geq 0\} \cup \{b(cd)^na \mid n \geq 0\} \cup \{b(cd)^nb \mid n \geq 0\}$

4. $\{ac^nd^nb \mid n \geq 1\}$

Answer: 3

Q2: -24 is 2's complement form is

1. 11101000

2. 01111111

3. 01001000

4. 00111111

Answer: 1

Q3: A 2 bit binary multiplier can be implemented using

1. 2 input ANDs only
2. 2 input X-ORs and 4-input AND gates only
3. XOR gates and shift registers
4. Two (2) input NORs and one XNOR gate

Answer: 2

Q4: A _____ registrar stores the intermediate arithmetic and logic results in it.

1. Address registrar
2. Program counter
3. Index registrar
4. Accumulator

Answer: 4

Q5: A class is a

1. Structure
2. Memory
3. Template

4. Function

Answer: 3

Q6: A constructor without any arguments is

1. default constructor
2. parameterized constructor
3. none
4. overloading

Answer: 1

Q7: A default constructor is one that

1. that takes all default arguments
2. have to be called explicitly
3. gets called automatically
4. does take many parameters

Answer: 3

Q8: A finite automata that will accept only string X of length n will have _____ many states

- 1.n
2. $n/2$
3. $n+1$
4. infinite

Answer: 3

Q9: A friend function to a class A cannot access

1. the data members of the derived class of A.
2. onlineexam.data members and member functions.
3. protected data members and member functions.
4. private data members and member functions.

Answer: 1

Q10: A property which is not true for classes is that they

1. Can closely model objects in the real world.
2. bring together all aspects of an entity in one place.
3. permit data to be hidden from other classes.
4. are removed from memory when not in use.

Answer: 2

Q11: A quadruple is a record structure with _____ fields.

1. 3
2. 4
3. 1
4. 2

Answer: 2

Q12: A Stack-organised Computer uses instruction of

1. Zero addressing
2. Two-addressing
3. Indirect addressing
4. Index addressing

Answer: 1

Q13: Access to private data is

1. Restricted to methods of the same class
2. Restricted to methods of other classes
3. Available to methods of the same class and other classes

4. Not an issue because the program will not compile

Answer: 2

Q14: All member functions are _____ to it's class by default

1. constant
2. non static
3. dynamic
4. static


Answer: 2

Q15: An LALR(1) parser for a grammar G can have shift-reduce (S-R) conflicts if and only if

1. The LR(1) parser for G has S-R conflicts.
2. The LR(0) parser for G has S-R conflicts.
3. The LALR(1) parser for G has reduce-reduce conflicts
4. The SLR(1) parser for G has S-R conflicts.

Answer: 1

Q16: An optimizing compiler

1. Is optimized to occupy less space
2. Optimized the code 
3. Is optimized to take less time for execution
4. Secured Code

Answer: 3

Q17: An unambiguous grammar has

1. Exactly one leftmost derivation for a string w
2. At most one leftmost and one rightmost derivation for a string w
3. At most one rightmost derivation for a string w
4. Exactly one leftmost and rightmost derivation for a string w

Answer: 2

Q18: An unambiguous grammar has

1. Exactly one leftmost derivation for a string w
2. At most one leftmost and one rightmost derivation for a string w
3. At most one rightmost derivation for a string w

4. Exactly one leftmost and rightmost derivation for a string w

Answer: 2

Q19: ASCII, EBCDIC, and Unicode are examples of -----

1. integrated circuits
2. binary coding schemes
3. two-state systems
4. adapter cards

Answer: 2

Q20: baa^*c denotes the set

1. $\{b^na^mc^p | n,m,p \geq 1\}$
2. $\{ba^nc | n \geq 0\}$
3. $\{ba^nc | n \geq 1\}$
4. $\{w | w \text{ is a string of } a,b,c\}$

Answer: 3

Q21: BCD to seven segment is a

1. encoder
2. carry look ahead
3. comparator
4. decoder

Answer: 4

Q22: Calculate the person months for a project that was completed in two months with two people working on it.

1. 2
2. 4
3. 1
4. 8

Answer: 2

Q23: class A { int a; static float b; } ; What is the size of class A?

1. sizeof(int) * 2
2. sizeof(int) + sizeof(float)
3. sizeof(int)
4. sizeof(float)

Answer: 3

Q24: `class n{ int a=0;}obj;` what will happen?

1. nothing
2. initializes the data member with 0
3. error
4. initializes the object with 0

Answer: 2

Q25: `class n{ public: int *a;}o,p;` assigning `o=p` is called?

1. deep copy
2. shallow copy
3. error
4. constructor

Answer: 2

Q26: `class n{ public: int a;}`

`obj; obj.a=10; cout << a;`

1. error
2. 10
3. 1
4. 0

Answer: 1

Q27: `class n{ public: int a=7;}p,q; cout<< n.a;`

1. 0
2. error
3. depends on compiler
4. 7

Answer: 2

Q28: Consider the regular language $L = (111 + 11111)^*$. The minimum number of states in any DFA accepting the language is

1. 3
2. 5
3. 8
4. 9

Answer: 4

Q29: Content of the program counter is added to the address part of the instruction in order to obtain the effective address is called.

1.index addressing mode.

2.register mode.

3. implied mode.

4.relative address mode.

Answer: 2

Q30: Data Members of the base class that are marked private:

1. are directly accessible in the derived class

2. are visible in the derived class

3. exist in memory when the object of the derived class is created

the derived class

4. does exist in memory when the object of the derived class is created

Answer: 4

Q31: Decimal number 9 in Gray code is

1. 1111

2.1101

3.1100

4.1110

Answer: 2

Q32: During a software development project two similar requirements defects were detected. One was detected in the requirements phase, and the other during the implementation phase. Which of the following statements is mostly likely to be true?

1. There is no relationship between the phase in which a defect is discovered and its repair cost. .
2. The most expensive defect to correct is the one detected during the implementation phase.
3. The most expensive defect to correct is the one detected during the requirements phase.
4. The cost of fixing either defect will usually be similar.

Answer: 2

Q33: Effective software project management focuses on four P's which are

1. people, product, process, project
2. people, product, performance, process
3. people, performance, payoff, product
4. people, process, payoff, product

Answer: 1

Q34: FAT file system is

1. Indexed Allocation and used in Windows OS
2. used in Windows OS
3. about storage in RAM
4. Indexed Allocation.

Answer: 2

Q35: Files whose names end in .h are called _____ files

1. helper
2. header
3. handy
4. helping

Answer: 2

Q36: Finite automata recognizes -----grammars

1. type-1

2.type-3

3. type-0

4.type-2

Answer: 2

Q37: Floating point representation is used to store _____.

1.Boolean values

2.real integers

3. integers

4.whole numbers

Answer: 2

Q38: Function templates can accept

1. Only parameters of the basic type

2. Only one parameter

3. Any type of parameters

4. Only parameters of the derived type

Answer: 1

Q39: Functional requirements of a system is modelled using

1. Use-case Diagram
2. Sequence Diagram
3. Class Diagram
4. Package Diagram

Answer: 1

Q40: Given an arbitrary non-deterministic finite automaton (NFA). with N states, the maximum number of states in an equivalent minimized DFA is at least.

1. N^2

2. $2N$

3. 2^N

4. $N!$

Answer: 2

Q41: Given the language $L = \{ab, aa, baa\}$, which of the following strings are in L^* ?

1) abaabaaa**baa**

2) aaaa**baaaa**

3) baaaaabaaaab

4) baaaaab**aa**

1.1, 2 and 3

2.2, 3 and 4

3.1, 2 and 4

4.1, 3 and 4

Answer: 3

Q42: Having more than one constructor in a class is

1. not possible

2. compile time polymorphism

3. constructor overriding

4. error

Answer: 2

Q43: How many DFAs exist with two states over the input alphabet (a,b)

1. 16

2. 26

3. 32

4. 64

Answer: 4

Q44: How many possible outputs would a decoder have with a 6-bit binary input?

1. 16

2. 64

3. 128

4. 32

Answer: 2

Q45: How many select lines would be required for an 8-line-to-1-line multiplexer?

1. 2

2. 4

3. 3

4. 8

Answer: 3

Q46: How many stages are there in process improvement?

1. three

2. four

3. five

4. six

Answer: 1

Q47: How many two state FA can be drawn over alphabet $\{0,1\}$ which accepts $(0+1)^*$

1. 12

2. 14

3. 20

4. 15

Answer: 3

Q48: How will you free the allocated memory ?

1. delete(var-name);
2. dalloc(var-name);
3. free(var-name);
4. remove(var-name);

Answer: 3

Q49: Identify the invalid statement from the following

1. for (; ;)
2. if (1)
3. break(0)
4. while(false)

Answer: 3

Q50: If a register containing binary data (11001100) is subjected to arithmetic shift left operation, then the content of the register after 'ashl' shall be

1. (10011000)
- 2.(11001100)
- 3.(1101100)

4.(10011001)

Answer: 1

Q51: If a university sets up web-based information system that faculty could access to record student grades and to advise students, that would be an example of an

1. intranet
2. ERP
3. extranet
4. CRM

Answer: 1

Q52: If M1 machine recognizing L with n states, then M2 recognizing L^* constructed Using Thompson construction will have ----- states.

1. $n+2$
2. $n+1$
3. n
4. $n-1$

Answer: 2

Q53: If M1 machine recognizing L with n states, then M2 recognizing L^* constructed Using Thompson construction will have ----- states.

1. $n+2$

2. $n+1$

3. n

4. $n-1$

Answer: 2

Q54: If there is a complete DFA M1 recognizing a language L1 and has m states out of which two are final states then the machine M recognizing L1 complement will have _____ final states.

1. $m+2$

2. m

3. $m-2$

4. 2

Answer: 1

Q55: If X is the name of the class, what is the correct way to declare copy constructor of X?

1. X(class X* arg)
2. X(X& arg)
3. X(X* arg)
4. X(X arg)

Answer: 2

Q56: If you assign a default value to any variable in a function prototype's parameter list, then _____

1. all parameters to the left of that variable must have default values
2. all parameters to the right of that variable must have default values
3. all other parameters in the function prototype must have default values
4. no other parameters in that prototype can have default values

Answer: 2

Q57: If you want to use a class to define objects in many different programs, you should define the class in a C++ _____ file

1. text
2. source
3. header
4. program

Answer: 3

Q58: In a BCD-to-seven-segment converter, why must a code converter be utilized?

1. to convert the 4-bit BCD into Gray code
2. to convert the 4-bit BCD into 7-bit code
3. to convert the 4-bit BCD into 10-bit code
4. No conversion is necessary

Answer: 2

Q59: In C++, dynamic memory allocation is accomplished with the operator _____

1. new
2. this
3. malloc
4. delete

Answer: 1

Q60: In C++, dynamic memory allocation is achieved with the operator _____

1. malloc()
2. delete
3. new
4. this

Answer: 3

Q61: In CMM, the life cycle activities of requirements analysis, design, code, and test are described in

1. Software Product Engineering
2. Software Quality Assurance
3. Software Subcontract Management
4. Software Quality Management

Answer: 1

Q62: In computers, subtraction is generally carried out by _____.

1. 9's complement
2. 2's complement
3. 10's complement

4.1's complement

Answer: 2

Q63: In the types of Three-Address statements, copy statements of the form $x := y$ means

1. The value of x is assigned to y or the value of y is assigned to x.
2. The value of x is assigned to y and the value of y is assigned to x.
3. The value of y is assigned to x.
4. The value of x is assigned to y.

Answer: 3

Q64: Many programmers separate a class into two files: _____

1. one for the primary functions and one for the auxiliary functions
2. one for the onlineexam.data and one for the private data
3. one for the void functions and one for the other functions
4. one for the declarations and one for the implementations

Answer: 4

Q65: Multiplication of a positive integer by a power of two can be replaced by left shift, which

executes faster on most machines. This is an example of

1. Useless Code
2. Strength Reduction
3. Induction Variable
4. Loop unwinding

Answer: 2

Q66: One can safely state that the output lines for a demultiplexer are under the direct control of the:

1. input data select lines
2. the internal OR gate
3. the internal AND gates
4. Input data line

Answer: 1

Q67: Overloading a prefix increment operator by means of a member function takes

1. Three arguments
2. Two arguments
3. No argument
4. One argument

Answer: 3

Q68: Overloading involves writing two or more functions with _____

1. different names and different argument lists
2. different names and the same argument list
3. the same name and the same argument list
4. the same name and different argument lists

Answer: 4

Q69: Specify the 2 library functions to dynamically allocate memory?

1. malloc() and calloc()
2. malloc() and memalloc()
3. alloc() and memalloc()
4. memalloc() and faralloc()

Answer: 1

Q70: State the acronym of POMA in software project management

1. Project Organization Monitoring Adopting
2. Planning Organizing Monitoring Adjusting

3. project oriented maintenance and administration
4. Project Orientation Mapping Adjusting

Answer: 2

Q71: Templates improve

1. inheritance
2. reusability
3. class
4. functions

Answer: 2

Q72: The Epsilon-Closure of any state q will contain the state _____ irrespective of q .

1. p
2. Epsilon
3. q
4. Final State

Answer: 3

Q73: The binary value for 0.4375 is

1.0.1111

2. 0.0111

3. 0.0011

4. 0.1010

Answer: 0.0111

Q74: The call to the parameterized constructor of base class in the derived class

1. appears inside the definition of the derived class
2. ppears inside the definition of the derived class constructor
3. appears at the statement where the derived class object is created
4. appears in the member initialization list of the derived class constructor

Answer: 4

Q75: The fundamental notions of software engineering does not account for ?

1. Software reuse
2. Software Security
3. Software Validation
4. Software processes

Answer: 3

Q76: The language is $L = \{0^p 1^q 0^r \mid p, q, r \geq 0, p \neq r\}$ is

1. Context-sensitive but not context-free
2. Recursive but not Context-free
3. Regular
4. Context-free

Answer: 4

Q77: The library function used to find the last occurrence of a character in a string is

1. strnstr()
2. strrchr()
3. laststr()
4. strstr()

Answer: 2

Q78: The major source of data for other systems are:

1. Electronic Switching System

2. Transaction Processing Systems

3. Decision Support System

4. Management Information System

Answer: 2

Q79: The members of a class in c++ by default, are

1. private

2. protected

3. onlineexam./p>

4. mandatory to specify

Answer: 1

Q80: The minimum length for strings in the regular expression (10* + 001*)* is _____

1. Infinite

2. One

3. Zero

4. Two

Answer: 3

Q81: The negative numbers in the binary system can be represented by

1. 10's Complement
2. 2's complement
3. Sign magnitude
4. 1's complement

Answer: 2

Q82: The number of full and half-adders required to add 16-bit numbers is

1. 8 half-adders, 8 full-adders
2. 1 half-adder, 15 full-adders
3. 16 half-adders, 0 full-adders
4. 4 half-adders, 12 full-adders

Answer: 2

Q83: The number of states in a machine M recognizing $L_1 \cup L_2$ will be _____ where n is the number of states in M_1 and m is the number of states in M_2 .

1. $m-n$

2. $m+n$

3. $m+n+1$

4. $n-m$

Answer: 3

Q84: The number of states in a machine M recognizing $L_1 \cup L_2$ will be _____ where n is the number of states in M_1 and m is the number of states in M_2 .

1. $m-n$

2. $m+n$

3. $m+n+1$

4. $n-m$

Answer: 3

Q85: The number of states in DFA is ----- the number of states in NFA for the same Language.

1. Greater than

2. equal to

3. less than

4. greater than or equal to

Answer: 4

Q86: The processor 80386/80486 and the Pentium processor uses _____ bits address bus:

1. 36

2. 32

3. 16

4. 64

Answer: 2

Q87: The set of all strings over the alphabet $\{a,b\}$ (including epsilon) is denoted by

1. $(a+b)^+$

2. a^+b^+

3. a^*b^*

4. $(a+b)^*$

Answer: 4

Q88: The set of fundamental assumptions about what products the organization should produce, how and where it should produce them, and for whom they should be produced is

1. organizational culture.
2. behavioral model.
3. rational model.
4. agency theory.

Answer: 1

Q89: The set of fundamental assumptions about what products the organization should produce, how and where it should produce them, and for whom they should be produced is

1. organizational culture.
2. behavioral model.
3. rational model.

4. agency theory.

Answer: 1

Q90: The special memory used to store the micro routines of a computer is _____.

1. Control table

2. Control store

3. Control mart

4. Control shop

Answer: 2

Q91: The system having memory elements are called.

1. sequential circuits

2. complex circuits

3. combinational circuits

4. logic circuits

Answer: 1

Q92: The term m45 should be made up of at least _____ literals.

1. 6
2. 31
3. 4
4. 5

Answer: 1

Q93: The three key levels at which responsibility can be defined is at the _____, _____, _____

1. Team, Organization, contractor
2. Project, Strategic, Activity
3. Project, Activity, WBS
4. Project, Organization, Team

Answer: nan

Q94: The while loop is referred to as a(n) _____ loop because the loop condition is tested at the beginning of the loop

1. priming
2. pretest
3. initial
4. beginning

Answer: 2

Q95: The word case used in the switch statement represents a

1. global variable in the C++ language
2. function in the C++ language
3. keyword in the C++ language
4. data type in the C++ language

Answer: 3

Q96: Two access specifiers in C++ are

1. void and free
2. onlineexam.and private(private,protected,public)
3. int and double
4. formal and informal

Answer: 2

Q97: Usecase analysis focuses upon

1. Actors
2. Objects

3. Data
4. Entities

Answer: 1

Q98: Variables inside parenthesis of functions declarations have _____ level access.

1. Local
2. Global
3. Module
4. Universal

Answer: 1

Q99: Virtual memory is _____

1. A type of memory used in super computers
2. An illusion of extremely large main memory
3. An extremely large main memory
4. An extremely large secondary memory

Answer: 2

Q100: WE RECEIVED "404 - PAGE NOT FOUND" MESSAGE, WHEN WE BROWSE THE WEB

PAGE. WHICH PROTOCOL PROVIDES THIS MESSAGE?

1.IGP

2. EGP

3.SNMP

4.ICMP

Answer: 3

Q101: What are the minimum number of 2-to-1 multiplexers required to generate a 2- input AND gate and a 2-input Ex-OR gate?

1.1 and 2

2.1 and 3

3.1 and 1

4. 2 and 2

Answer: 1

Q102: What does the following declaration mean?

```
int (*ptr)[10];
```

1. ptr is array of pointers to 10 integers
2. ptr is a pointer to an array of 10 integers
3. ptr is an array of 10 integers
4. ptr is an pointer to array

Answer: 2

Q103: What is an Accumulator?

1. A Flip flop
2. A counter
3. A Sequential Logic Circuit
4. A Combinational Logic Circuit

Answer: 1

Q104: What is an ALU?

1. A Combinational Logic Circuit
2. A Sequential Logic Circuit
3. A Combination of Combinational Circuit and Sequential Circuit
4. A flip flop

Answer: 1

Q105: What is the condition for setting the Overflow flag in status register?

1. Last two sum bits are different
2. Last two carries are same
3. Last two sum bits are same
4. Last two carries are different

Answer: 3

Q106: What is the maximum number of reduce moves that can be taken by a bottom-up parser for a

1. $n/2$
2. $n-1$
3. $2n-1$
4. 2^n

Answer: 2

Q107: What is the recommended distribution of effort for a software project?

1. 50-20-30
2. 50-30-20

3. 30-40-30

4. 40-20-40

Answer: 4

Q108: What is the return type of the conversion operator function?

1. no return type

2. int

3. void

4. float

Answer: 1

Q109: What is the status of the inputs S0, S1, and S2 of the 74151 eight-line multiplexer in order for the output Y to be a copy of input I5?

1. S0 = 1, S1 = 0, S2 = 1

2. S0 = 1, S1 = 1, S2 = 0

3. S0 = 0, S1 = 1, S2 = 0

4. S0 = 0, S1 = 0, S2 = 1

Answer: 1

Q110: What is true about constant member function of a class?

1. cannot access any of its class data members
2. cannot modify values of its class data members
3. cannot modify values of its class data members which are mutable
4. can modify values of its class data members

Answer: 2

Q111: What will be the output of the following code `#include void main() { int i; int a[3]=5; for (i=2;i>=0;i--) { printf("??%d\n?",a[i]); } }`

1. 0 0 5
2. 5 0 0
3. 5 garbage garbage
4. 5 null null

Answer: 1

Q112: When an instruction is read from the memory, it is called

- 1.Memory Read cycle
- 2.Fetch cycle

3.Instruction cycle

4.Memory write cycle

Answer: 2

Q113: When FA M is given which recognizes language L and reverse of L is found by using M then there can be _____Final states

1.Two

2.Three

3.Only one

4. Any number

Answer: 3

Q114: When there is complete DFA with Five states out of which two are final states if F is modified such that it recognizes complement of the original language then there will be at least _____final states.

1.3

2.2

3.5

4. 7

Answer: 3

Q115: When there is more than one final state in the reduced FA, then its regular expression will contain _____ operator surely

1. dot
2. binary +
3. star
4. unary +

Answer: 4

Q116: When we concatenate two languages L1 and L2 recognized by machine M1 and M2 we obtain a machine with final state same as that of _____

1. M1 OR M2
2. M1 AND M2
3. M2
4. M1

Answer: 2

Q117: Which directory implementation is used in most Operating System?

1. Two level directory structure
2. Acyclic directory structure
3. Single level directory structure
4. Tree directory structure

Answer: 4

Q118: Which is not a proper prototype?

1. double funct(char x)
2. void funct();
3. char x();
4. intfunct(char x, char y);

Answer: 1

Q119: WHICH OF THE BELOW IS CALLED CLASSLESS ADDRESS?

1.191.168.1.1/24

2.191.168.1.1/16

3.191.168.1.1/8

4. 191.168.1.1/4

Answer: 4

Q120: WHICH OF THE BELOW IS NOT AN EMAIL PROTOCOL?

1. SMTPMP

2. IMAP

3. POP

4. SNMP

Answer: 4

Q121: Which of the following calls a function named displayName, passing it no actual arguments?

1. call displayName

2. call displayName ()

3. displayName

4. displayName()

Answer: 4

Q122: Which of the following conversion is not possible (algorithmically)?

1. nondeterministic PDA to deterministic PDA
2. nondeterministic FSA to deterministic FSA
3. regular grammar to context-free grammar
4. nondeterministic TM to deterministic TM

Answer: 1

Q123: Which of the following derivations does a top-down parser use while parsing an input string?

The input is assumed to be scanned in left to right order.

1. Leftmost derivation
2. Leftmost derivation traced out in reverse
3. Rightmost derivation
4. Rightmost derivation traced out in reverse

Answer: 1

Q124: Which of the following functions compares two strings?

1. compare();

2. `cmp()`;
3. `stringcompare()`;
4. `strcmp()`;

Answer: 4

Q125: Which of the following gives the memory address of a variable pointed to by pointer a?

1. `a`;
2. `*a`;
3. `&a`;
4. `address(a)`;

Answer: 1

Q126: which of the following intermediate language can be used in intermediate code generation?

1. Quadraples
2. Postfix notation and Three address code
3. Triples
4. Infix notation and two address code

Answer: 2

Q127: Which of the following is a complete function?

1. void funct(int) { printf("Hello"); }
2. int funct();
3. void funct(x) { printf("Hello"); }
4. int funct(int x) { return x=x+1; }

Answer: 4

Q128: Which of the following is a valid destructor of the class name "Country"

1. void ~Country()
2. int ~Country(Country obj)
3. int ~Country()
4. Country()

Answer: 4

Q129: which of the following is an incorrect definition inside a class ?

1. void * operator new () { }
2. int operator ++() { }
3. void operator delete(void * ptr) { }
4. void * operator new(size_t size) { }

Answer: 2

Q130: Which of the following is correct for a gated D flip-flop?

- 1.The output toggles if one of the inputs is held HIGH.
- 2.Only one of the inputs can be HIGH at a time.
- 3.The output complement follows the input when enabled.
4. Q output follows the input D when the enable is HIGH.

Answer: 4

Q131: Which of the following is not a technology driver for an information system?

1. Collaborative technologies
2. Knowledge asset management
3. Enterprise applications
4. Object technologies

Answer: 2

Q132: Which of the following is not a type of constructor?

1. Copy Constructor
2. Friend Constructor
3. Default Constructor
4. Parametrized Constructor

Answer: 2

Q133: Which of the following is the insertion operator?

1. /*
2. //
3. <<
4. >>

Answer: 3

Q134: Which of the following is/are main parameters that you should use when computing the costs of a software development project?

1. Hardware and software costs
2. Effort costs (the costs of paying software engineers and managers)
3. Travel and training costs
4. All the parameters required given in the option.

Answer: 4

Q135: Which of the following language feature is not an access specifier in C++?

1. internal
2. protected
3. onlineexam./p> 4. private

Answer: 1

Q136: Which of the following regular expression denotes a language comprising of all possible strings over {a,b} of length n where n is a multiple of 3?

1. (aaa+ab+a)+(bbb+bb+a)
2. ((a+b) (a+b) (a+b))*
3. (aaa+bbb)*
4. (a+b+aa+bb+aba+bba)*

Answer: 2

Q137: Which of the following regular expression identities are true?

1. $r^* s^* = r^* + s^*$
2. $(r + s)^* = (r^* s^*)^*$

3. $(r + s)^* = r^* + s^*$

4. $(r + s)^* = r^* s^*$

Answer: 4

Q138: Which of the following results in a compile-time error?

1. `int f2() { static int i; i++; return i; }`

2. `int f3(static int i) { return 300;}`

3. `static int f1() { return 100; }`

4. `static int a;`

Answer: 2

Q139: Which of the following scheduling algorithm comes under preemptive scheduling?

1. FCFS

2. Round Robin

3. Multilevel Queue Scheduling

4. Largest Job First

Answer: 2

Q140: Which of the following special symbol is allowed in a variable name?

1. _ (underscore)
2. - (hyphen)
3. | (pipeline)
4. * (asterisk)

Answer: 1

Q141: Which of the following statement is false?

1. For $R = R1^*$, $L(R)$ is empty if and only if $L(R1)$ is empty
2. For $R = (R1)$, $L(R)$ is empty if and only if $L(R1)$ is empty
3. For $R = R1R2$, $L(R)$ is empty if and only if either $L(R1)$ or $L(R2)$ is empty.
4. If $R = R1 + R2$, $L(R)$ is empty if and only if both $L(R1)$ and $L(R2)$ are empty.

Answer: 3

Q142: Which of the following statement is false?

1. If there is a PDA by acceptance state that accept L , then there is also a PDA by empty stack that accept L

2. If there is a NPDA that accept L , then there is also a DPDA that accept L .
3. If there is a PDA by empty stack, then there is also a CFG G that accept L .
4. If there is a CFG G that accepts L , then there is also a PDA that accept L .

Answer: 1

Q143: Which of the following statements is/are FALSE?

1. Turing recognizable languages are closed under union and complementation.
2. Turing decidable languages are closed under intersection and complementation
3. Turing recognizable languages are closed under union and intersection.
4. For every non-deterministic Turing machine, there exists an equivalent deterministic Turing machine.

Answer: 1

Q144: Which of the following suffices to convert an arbitrary CFG to an LL(1) grammar?

1. Removing left recursion alone
2. Factoring the grammar alone
3. Removing left recursion and factoring the grammar
4. Removing left recursion, left factoring and ambiguity of the grammar

Answer: 4

Q145: Which of the following ways are legal to access a class data member using this pointer?

1. this.x
2. *this.x
3. this->x
4. *this-x

Answer: 3. this->x

Q146: Which one of the following is a top-down parser?

1. An LR(k) parser.
2. An LALR(k) parser
3. Operator precedence parser.
4. Recursive descent parser.

Answer: 4

Q147: Which one of the following is a valid project Key Performance Indicator (KPI)?

1. Master schedule.
2. Staff appraisals.

3. Management buy in.
4. Milestone achievement.

Answer: 4

Q148: Which one of the following is the correct way to declare a pure virtual function?

1. `virtual void Display(void){0};`
2. `void Display(void) = 0;`
3. `virtual void Display(void) = 0;`
4. `virtual void Display = 0;`

Answer: 3

Q149: Which one of the following languages over alphabet $\{0,1\}$ is described by the regular expression:

$(0+1)^*0(0+1)^*0(0+1)^*$

1. The set of all strings containing at least two 0's
2. The set of all strings that begin and end with either 0 or 1.
3. The set of all strings containing at most two 0's.
4. The set of all strings containing the substring 00.

Answer: 1

Q150: Which one of the following models is not suitable for accommodating any change?

1. Build & Fix Model
2. RAD Model
3. Waterfall Model
4. Prototyping Model

Answer: 3

Q151: Which one of the following regular expressions over $\{0,1\}$ denotes the set of all strings not containing 100 as a substring?

1. $0^*(11^*0)^*$

2. 0^*1^*01

3. $0^*(10+1)^*$

4. 0^*1010^*

Answer: 3

Q152: Which one of the following statements best defines the purpose of a Product Breakdown

Structure (PBS)?

1. To identify the health and safety strategies and procedures to be used on the project
2. To establish the extent of work required prior to project commissioning and the handover
3. To define how the products are produced by identifying derivations and dependencies
4. To define the hierarchy of deliverables that are required to be produced on the project

Answer: 4

Q153: Who owns the Project Management Plan (PMP)?

1. The project team.
2. The chief executive.
3. The project manager.
4. The project support office.

Answer: 3

Q154: Write the regular expression to denote the language L over $\Sigma = \{a, b\}$ such that all the string do not contain the substring "ab".

1. a^*b^*
2. b^*a^*
3. $(ab)^*$
4. $(ba)^*$

Answer: 2

Q155: Zero address instruction format is used for

- 1.Von-Neuman architecture
- 2.RISC architecture
- 3.CISC architecture
4. Stack-organized architecture

Answer: 4

Q156: Which of the following is minimum error code?

- 1.Octal code
- 2.Grey code
- 3.Binary code
- 4.Excess 3 code

Answer: 2

Q157: When used with an IC, what does the term "QUAD" indicate?

1.4 circuits

2.2 circuits

3.8 circuits

4.6 circuits

Answer: 1

Q158: Adding 1001 and 0010 gives

1.1011

2.1111

3.0

4.1010

Answer: 1

Q159: Radix of binary number system is _____?

1.0

2.1

3.2

4.A&B

Answer: 3

Q160: SR Flip flop can be converted to T-type flip-flop if ?

1. is connected to Q

2.R is connected to Q

3.Both S and R are shortend

4.S and R are connected to Q and Q' respectively

Answer: 4

Q161: The main difference between JK and RS flip-flop is that?

1. JK flip-flop does not need a clock pulse
2. there is feedback in JK flip-flop
3. JK flip-flop accepts both inputs as 1
4. JK flip-flop is acronym of junction cathode multivibrator

Answer: 3

Q162: Register is a -----

1. Set of capacitors used to register input instructions in a digital computer
2. Set of paper tapes and cards put in a file
3. Temporary storage unit within the CPU having dedicated or general purpose use
4. Part of the auxiliary memory

Answer: 3

Q163: Magnitude comparator compares using operation of

1.addition

2.subtraction

3.multiplication

4.division

Answer: 3

Q164: An SR flip flop cannot accept the following input entry

1.Both input zero

2.zero at R and one at S

3.zero at S and one at R

4.Both inputs one

Answer: 4

Q165: One operation that is not given by magnitude comparator

1.equal

2.less

3.greater

4.addition

Answer: 4

Q166: Automaton accepting the regular expression of any number of a ' s is:

1.a*

2.a

3.a*b*

4.abc

Answer: 1

Q167: Let L be a set accepted by a nondeterministic finite automaton. The number of states in non-deterministic finite automaton is $|Q|$. The maximum number of states in equivalent finite automaton that accepts L is

1. $|Q|$

2. $2|Q|$

3. 2 raise to power $|Q|$

4. 2 raise to power $|Q|$

Answer: 4

Q168: Number of final state require to accept Φ in minimal finite automata.

1. 4

2. 3

3. 1

4. 0

Answer: 4

Q169: The embedded c program is converted by cross compiler to

1.

the machine code corresponding to the processor of the PC used for application development

2.the machine code corresponding to a processor which is different from the processor of the PC used for application development

3.the machine code for all the microcontrollers

4.assemble code of the PC used for application development

Answer: 2

Q170: The regular expression $0^*(10^*)^*$ denotes the same set as

1. $(1^*0)^*1^*$

2. $0 + (0 + 10)^*$

3. $(0 + 1)^* 10(0 + 1)^*$

4. $(0+1)^*$

Answer: 1

Q171: Which of the following statements is/are FALSE?

- (1) For every non-deterministic Turing machine, there exists an equivalent deterministic Turing machine.
- (2) Turing recognizable languages are closed under union and complementation.
- (3) Turing decidable languages are closed under intersection and complementation
- (4) Turing recognizable languages are closed under union and intersection.

1.1 and 4 only

2.1 and 3 only

3.2 only

4.3 only

Answer: 3

Q172: Two automata are equal when

1.

both are under union

2.

both are under same language

3.

both are having equal number of states

4.

both are having same number of final states

Answer: 2

Q173: What is the minimum number of states needed to a DFA over $S = (a, b)$ which accept those words from S such that the number of a is even and the number of b is divisible by three.

1.2 states

2.4 states

3.6 states

4.5 states

Answer: 3

Q174: If a language is denoted by a regular expression

$$L = (x)^* (x | yx),$$

then which of the following is not a legal string within L ?

1.yx

2.xyx

3.x

4.x y x y x

Answer: 4

Q175: The CFG

$$s \rightarrow as | bs | a | b$$

is equivalent to regular expression

1.(a + b)

2.(a + b) (a + b)*

3. $(a + b) (a + b)$

4. $(a + b) (a + b)(a + b) (a + b)$

Answer: 2

Q176: -----is used to check whether the language is not regular.

1. Pumping Lemma

2. RE

3. MN Theorem

4.

Pigeon hole principle

Answer: 1

Q177: The minimum number of page frames that must be allocated to a running process in a virtual memory environment is determined by

1. the instruction set architecture

2.page size

3.physical memory size

4.number of processes in memory

Answer: 1

Q178: A computer has a 256 KByte, 4-way set associative, write back data cache with block size of 32 Bytes. The processor sends 32 bit addresses to the cache controller. Each cache tag directory entry contains, in addition to address tag, 2 valid bits, 1 modified bit and 1 replacement bit. The size of the cache tag directory is

1.11

2.14

3.27

4.16

Answer: 4

Q179: Pre-emptive scheduling is the strategy of temporarily suspending a running process

1.before the CPU time slice expires

2.to allow starving processes to run

3.when it requests IO

4.None of mentioned

Answer: 1

Q180: Multiprogramming systems _____

1.Are easier to develop than single programming systems

2.Execute each job faster

3.Execute more jobs in the same time

4.Are used only on large main frame computers

Answer: 3

Q181: The DMA controller has _____ registers

1.4

2.2

3.3

4.1

Answer: 3

Q182: The truth table

X	Y	f(X,Y)
---	---	--------

0	0	0
---	---	---

0	1	0
---	---	---

1	0	1
---	---	---

1	1	1
---	---	---

represents the Boolean function

1.X

2.X+Y

3.X'Y'

4.Y

Answer: 1

Q183: Which of the following regular expression denotes a language comprising of all possible strings over $\{a,b\}$ of length n where n is a multiple of 3?

1. $(a+b+aa+bb+aba+bba)^*$

2. $(aaa+bbb)^*$

3. $((a+b)(a+b)(a+b))^*$

4. $(aaa+ab+a)+(bbb+bb+a)$

Answer: 3

Q184: Which of the following statement is true?

1. NFA is more powerful than DFA

2. DFA is more powerful than NFA

3. NFA and DFA have equal power

4.None

Answer: 3

Q185: Assume that a mergesort algorithm in the worst case takes 30 seconds for an input of size 64. Which of the following most closely approximates the maximum input size of a problem that can be solved in 6 minutes?

1.256 2.2048 3.1024 4.512

Answer: 4

Q186: ElGamal encryption system is:

1.symmetric key encryption algorithm

2.asymmetric key encryption algorithm

3.not an encryption algorithm

4.none of the mentioned

Answer: 2

Q187: #include < stdio.h >

```
int main()
```

```
{
```

```
    typedef auto int AI;
```

```
    AI var=100;
```

```
    printf("var=%d",var);
```

```
    return 0;
```

```
}
```

Find the output

1.var=100

2.var=AI

3.var=0

4.Error

Answer: 4

Q188: #include < stdio.h >

```
int main()
```



```
{  
  
typedef char* string;  
  
string myName="ABCDEFGH";  
  
printf("myName=%s (size=%d)",myName,sizeof(myName));  
  
return 0;  
  
}
```

Find the output

- 1.myName=ABCDEFGH(size=7)
- 2.Error
- 3.myName=ABCDEFGH(size=4)
- 4.myName=ABCDEFGH(size=8)

Answer: 3

Q189: #include < stdio.h >

```
int main()
```

```
{  
  
typedef int AAA,BBB,CCC,DDD;  
  
AAA aaa=10;  
  
BBB bbb=20;  
  
CCC ccc=30;  
  
DDD ddd=40;
```

```
printf("%d,%d,%d,%d",aaa,bbb,ccc,ddd);  
  
return 0;  
  
}
```

Find the output

- 1.Error
- 2.10,10,10,10
- 3.10,20,30,40
- 4.AAA,BBB,CCC,DDD

Answer: 3

Q190: #include < stdio.h >

```
int main()  
{  
    typedef struct  
    {  
        int empid;  
        int bsal;  
    }EMP;  
    EMP E={10012,15100};  
    printf("%d,%d",E.empid,E.bsal);  
    return 0;  
}
```

Find the output

1.10012,15100

2.0,0

3.Error

4.10012,10012

Answer: A

Q191: #include <stdio.h>

void main()

{ unsigned char var=0;

for(var=0;var<=255;var++);

{

printf("%d ",var);

}

}

Find the output

1.0 1 2 ... 255

2.255

3.256

4.blank screen as output

Answer: 1

Q192: #include <stdio.h>

#define MOBILE 0x01

#define LAPPY 0x02

int main()

{

 unsigned char item=0x00;

 item |=MOBILE;

 item |=LAPPY;

 printf("I have purchased");

 if(item & MOBILE){

 printf("Mobile, ");

 }

 if(item & LAPPY){

 printf("Lappy");

 }

 return 1;

}

1.I have purchased ...:

2.I have purchased ...:Mobile, Lappy

3.I have purchased ...:Mobile,

4.I have purchased ...:Lappy

Answer: 2

Q193: #include <stdio.h>

```
int main()
```

```
{
```

```
    char flag=0x0f;
```

```
    flag &= ~0x02;
```

```
    printf("%d",flag);
```

```
    return 0;
```

```
}
```

Predict the Output.

1.13

2.d

3.22

4.10

Answer: 1

Q194: #include <stdio.h>

```
int main()
{
    int a=10;
    int b=2;
    int c;

    c=(a & b);
    printf("c= %d",c);

    return 0;
}
```

Find the output.

1.c = 12

2.c = 10

3.c = 2

4.c = 0

Answer: 3

Q195: #include <stdio.h>

```
#define FUN(x,y) x##y
```

```
int main()
```

```
{
```

```
int a1=10,a2=20;

printf("%d...%d",FUN(a,1),FUN(a,2));

return 0;

}
```

Find the output

- 1.Error
- 2.10...10
- 3.20...20
- 4.10...20

Answer: 4

Q196: #include <stdio.h>

```
#define LARGEST(x,y) (x>=y)?x:y
```

```
int main()
```

```
{
```

```
int a=10,b=20,l=0;
```

```
l=LARGEST(a++,b++);
```

```
printf("a=%d,b=%d,largest=%d",a,b,l);
```

```
return 0;
```

```
}
```

Find the output

1.a=10,b=20,largest=20

2.a=11,b=21,largest=20

3.a=11,b=21,largest=21

4.a=11,b=22,largest=21

Answer: 4

Q197: #include <stdio.h>

#define MAX 100

int main()

{

#define MAX 20

printf("MAX=%d...",MAX);

return 0;

}

Find the output

1.Error

2.MAx=100...

3.MAx=20...

4.MAX=10020

Answer: 3) 20

Q198: #include <stdio.h>

#define MAX 10

int main()

{ int array[MAX]={1,2,3},tally;

for(tally=0;tally< sizeof(array)/sizeof(int);tally+=1)

printf("%d ",*(tally+array));

return 0;

}

Find the output

1.Error

2.1 3 4 5 6 7 8 9 10 11

3.1 2 3 0 0 0 0 0 0

4.0 0 0 0 0 0 0 0 0

Answer: 3)12300000

Q199: #include <stdio.h>

#define MAX 99

int main()

```
{  
  
    printf("%d...",MAX);  
  
    #undef MAX  
  
    printf("%d",MAX);  
  
    return 0;  
  
}
```

Find the output

1.99...0

2.99...99

3.Error

4.MAX...MAX

Answer: 3

Q200: #include <stdio.h>

#define TEXT IncludeHelp

int main()

```
{  
  
    printf("%s",TEXT);  
  
    return 0;  
  
}
```

Find the output

1.IncludeHelp

2.TEXT

3.Error

4.TEXT IncludeHelp

Answer: 3) error

Q201: #include <stdio.h>

#define TRUE 1

int main()

{

if(TRUE)

printf("1");

printf("2");

else

printf("3");

printf("4");

return 0;

}

Find the output.

1.1

2.Error

3.2

4.12

Answer: 2)error

Q202: #include <stdio.h>

#define TRUE 1

int main()

{

int loop=10;

while(printf("Hello ") && loop--);

}

Find the output

1.Hello

2.Hello Hello Hello Hello ... (infinite times)

3.Hello (10 times)

4.Hello (11 times)

Answer: 4)11 times

Q203: #include <stdio.h>

#define VAR1 VAR2+10

#define VAR2 VAR1+20

int main()

{

printf("%d",VAR1);

return 0;

}

Find the output

1.VAR2+10

2.VAR1+20

3.Error

4.10

Answer: 3)error

Q204: #include <stdio.h>

#include < string.h >

struct student

{

char name[20];

```

}std;

char * fun(struct student *tempStd)
{
    strcpy(tempStd->name,"Thomas");
    return tempStd->name;
}

int main()
{
    strcpy(std.name,"Mike ");
    printf("%s%s",std.name,fun(&std));
    return 0;
}

```

Find the output

- 1.Mike Thomas
- 2.Mike Mike
- 3.ThomasThomas
- 4.ThomasMike

Answer: 3

Q205: #include <stdio.h>

#include <string.h>

```
int main()
{
    char s1[]="IncludeHelp";
    char s2[10];

    strncpy(s2,s1,5);
    printf("%s",s2);
    return 0;
}
```

Find the output

- 1.Inclu
- 2.IncluGARBAGE_VALUE
- 3.Error
- 4.IncludeHelp

Answer: 1

Q206: #include <stdio.h>

#include <string.h>

```
int main()
{
    char str1[]="IncludeHelp",str2[]=".Com";
    printf("%s",str1+strlen(str2));
}
```

```
return 0;  
}
```

Find the output

- 1.IncludeHelp.Com
- 2.udeHelp
- 3.Error
- 4.IncludeHelp4

Answer: 2

Q207: #include <stdio.h>

#include <string.h>

int main()

{

char str[50]="IncludeHelp";

printf("%d...%d",strlen(str),sizeof(str));

return 0;

}

Find the output

1.50...5011...50

2.11...50

3.11...11

4.50...11

Answer: 2

Q208: #include <stdio.h>

#include <string.h>

int main()

{

int val=0;

char str[]="IncludeHelp.Com";

val=strcmp(str,"includehelp.com");

printf("%d",val);

return 0;

}

Find the output

1.0

2.1

3.-1

4.Error

Answer: -1

Q209: #include <stdio.h>

```
#define OFF 0
```

```
#if debug == OFF
```

```
int a=11;
```

```
#endif
```

```
int main()
```

```
{
```

```
int b=22;
```

```
printf("%d...%d",a,b);
```

```
return 0;
```

```
}
```

Find the output

1.11...22

2.Error

3.11...11

4.22...22

Answer: 1

Q210: #include <stdio.h>

```
int main()
{
    char *text="Hi Babs.";

    char x=(char)(text+3);

    printf("%c\n",x);

    return 0;
}
```

Find the output

- 1.Garbage
- 2.B
- 3.Error
- 4.Null

Answer: 3

Q211: #include <stdio.h>

```
int main()
{
    char *text="Hi Babs.";

```

```
char x=(char)(text[3]);
```

```
printf("%c\n",x);
```

```
return 0;
```

```
}
```

Find the output

1.Garbage

2.B

3.Error

4.Null

Answer: B

Q212: #include <stdio.h>

```
int main()
```

```
{
```

```
int anyVar=10;
```

```
printf("%d",10);
```

```
return 0;
```

```
}
```

```
extern int anyVar;
```

Find the output

1.Compile time error

2.10

3.Run Time error

4.No output

Answer: 10

Q213: #include <stdio.h>

```
int main()
```

```
{
```

```
int x=2.3;
```

```
const char c1=(float)x;
```

```
const char c2=(int)x;
```

```
printf("%d,%d\n",c1,c2);
```

```
return 0;
```

```
}
```

Find the output

1.Error

2.2.3,2

3.2.3000000,2

4.2,2

Answer: 2,2

Q214: #include <stdio.h>

```
struct sample
```

```
{
```

```
    int a;
```

```
}sample;
```

```
int main()
```

```
{
```

```
    sample.a=100;
```

```
    printf("%d",sample.a);
```

```
    return 0;
```

```
}
```

Find the output

1.0

2.100

3.ERROR

4.arning

Answer: 100

Q215: #include <stdio.h>

```
char* fun1(void)
```

```
{
```

```
    char str[]="Hello";
```

```
    return str;
```

```
}
```

```
char* fun2(void)
```

```
{
```

```
    char *str="Hello";
```

```
    return str;
```

```
}
```

```
int main()
```

```
{
```

```
    printf("%s,%s",fun1(),fun2());
```

```
    return 0;
```

```
}
```

Find the output

1.ERROR

2.Hello,Hello

3.Hello,Garbage

4.Garbage,Hello

Answer: 4

Q216: #include <stdio.h>

```
char* strFun(void)
```

```
{
```

```
    char *str="IncludeHelp";
```

```
    return str;
```

```
}
```

```
int main()
```

```
{
```

```
    char *x;
```

```
    x=strFun();
```

```
    printf("str value = %s",x);
```

```
    return 0;
```

```
}
```

Find the output

1.str value= Garbage value

2.str value = IncludeHelp

3.Error

4.No output

Answer: 2

Q217: #include <stdio.h>

```
int fooo(void)

{

    static int num=0;

    num++;

    return num;

}

int main()

{

    int val;

    val=fooo();

    printf("step1: %d\n",val);

    val=fooo();

    printf("step2: %d\n",val);

    val=fooo();

    printf("step3: %d\n",val);

    return 0;

}
```

Find the output

1.step1: 1

step2: 1

step3: 1

2.step1: 1

step2: 2

step3: 3

3.step1: 0

step2: 0

step3: 0

4.ERROR

Answer: 2

Q218: #include <stdio.h>

int main()

{

#ifdef debug

printf("Start debugging...");

#endif

printf("IncludeHelp");

return 0;

}

Find the output

1.Start debugging...IncludeHelp

2.IncludeHelp

3.Error

4.debug

Answer: 2

Q219: #include <stdio.h>

```
int main()
```

```
{ int a[5]={0x00,0x01,0x02,0x03,0x04},i;
```

```
  i=4;
```

```
  while(a[i])
```

```
  {
```

```
    printf("%02d ",*a+i);
```

```
    --i;
```

```
  }
```

```
  return 0;
```

```
}
```

Find the output

1.00 01 02 03 04

2.04 03 02 01 00

3.04 03 02 01

4.01 02 03 04

Answer: 3

Q220: #include <stdio.h>

int main()

{ int a[5]={1,2,3,4,5},b[5]={10,20,30,40,50},tally;

for(tally=0;tally< 5;++tally)

(a+tally)=(tally+a)+ *(b+tally);

for(tally=0;tally< 5;tally++)

printf("%d ",*(a+tally));

return 0;

}

Find the output

1.1 2 3 4 5

2.10 20 30 40 50

3.11 22 33 44 55

4.Error

Answer: 3

Q221: #include <stdio.h>

int main()

{ static int array[]={10,20,30,40,50};

printf("%d...%d", *array, *(array+3) * *array);

return 0;

}

Find the output

1.Error

2.10...40

3.10...300

4.10...400

Answer: 4

Q222: #include <stdio.h>

int main()

{ static int x[]={ 'A','B','C','D','E'},tally;

for(tally=0;tally< sizeof(x)/sizeof(int) ; tally+=1)

printf("%c,%c,%c\n",*(x+tally)+1,x[tally]+1,*(tally+x)+1);

return 0;

}

Find the output

1.Error

2.A,A,A

B,B,B

C,C,C

D,D,D

E,E,E

3.B,B,B

C,C,C

D,D,D

E,E,E

F,F,F

4.E,E,E

D,D,D

C,C,C

B,B,B

A,A,A

Answer: 3

Q223: #include <stdio.h>

int main()

{

char result,str[]="\0IncludeHelp";

result=printf("%s",str);

```
if(result)

printf("TRUE");

else

printf("FALSE");

return 0;

}
```

Find the output

1.\0IncludeHelpTRUE

2.\0IncludeHelpFALSE

3.Error

4.FALSE

Answer: 4

Q224: #include <stdio.h>

```
int main()
```

```
{
```

```
    char str[8]="IncludeHelp";
```

```
    printf("%s",str);
```

```
    return 0;
```

```
}
```

Find the output

- 1.IncludeHelp
- 2.IncludeH
- 3.Error
- 4.No output

Answer: 3

Q225: #include <stdio.h>

```
int main()
```

```
{
```

```
    char str[]="Hello%s%dFriends";
```

```
    printf(str);
```

```
    printf("\n");
```

```
    printf("%s",str);
```

```
    return 0;
```

```
}
```

Find the output

- 1.HelloFriends

HelloFriends

2.Hello%s%dFriends

Hello%s%dFriends

3.Hello(null)0Friends

Hello%s%dFriends

4.Garbage value

Answer: 3

Q226: #include <stdio.h>

int main()

{

char str[]="value is =%d";

int a='7';

str[11]='c';

printf(str,a);

return 0;

}

Find the output

1.value is = %d

2.value is = %c

3.value is = 55

4.value is = 7

Answer: 4

Q227: #include <stdio.h>

```
int main()
```

```
{
```

```
    char X[10]={'A'},i;
```

```
    for(i=0; i<10; i++)
```

```
        printf("%d ",X[i]);
```

```
    return 0;
```

```
}
```

Find the output

1.A 0 0 0 0 0 0 0 0 0

2.A

3.A 32 32 32 32 32 32 32 32 32

4.Error

Answer: 1

Q228: #include <stdio.h>

```
int main()

{

char *str="IncludeHelp";

printf("%c\n",&*str);

return 0;

}
```

Find the output

1.Error

2.IncludeHelp

3.I

4.*I

Answer: 3

Q229: #include <stdio.h>

```
int main(){

float a=125.50;

int b=125.50;

char c='A';

printf("%d,%d,%d\n",sizeof(a),sizeof(b),sizeof(125.50));

printf("%d,%d\n",sizeof(c),sizeof(65));
```

```
return 0;  
}
```

What will be the output on a 32 bit compiler.

1.4, 4, 4

1, 4

2.4, 4, 8

1, 1

3.4, 4, 4

1, 1

4.4, 4, 8

1, 4

Answer: 4

Q230: #include <stdio.h>

```
int main()
```

```
{
```

```
if( (-100 && 100)|| (20 && -20) )
```

```
printf("%s","Condition is true.");
```

```
else
```

```
printf("%s","Condition is false.");
```

```
return 0;
```

```
}
```

Find the output

- 1.Condition is True
- 2.Condition is False
- 3.No output
- 4.Error

Answer: 1

Q231: #include <stdio.h>

```
int main()
```

```
{
```

```
int a=10;
```

```
if(10L == a)
```

```
printf("10L");
```

```
else if(10==a)
```

```
printf("10");
```

```
else
```

```
printf("0");
```

```
return 0;
```

```
}
```

Find the output.

1.10

2.10L

3.10L10

4.Error

Answer: 2

Q232: #include <stdio.h>

```
int main()
```

```
{
```

```
    int a=10;
```

```
    if(a==10)
```

```
    {
```

```
        printf("Hello...");
```

```
        break;
```

```
        printf("Ok");
```

```
    }
```

```
    else
```

```
    {
```

```
        printf("Hii");
```

```
    }
```

```
    return 0;
```

```
}
```

Find the output.

1.Hello...

2.Hello...OK

3.OK...

4.Error

Answer: 4

Q233: #include <stdio.h>

```
int main()
```

```
{
```

```
    int a=15;
```

```
    float b=1.234;
```

```
    printf("%*f",a,b);
```

```
    return 0;
```

```
}
```

Predict the output?

1.1.234

2.1.234000

3. 1.234000

4.Error

Answer: 1.234

Q234: #include <stdio.h>

```
int main()
```

```
{
```

```
int i;
```

```
for(i=0; i< 5; i++)
```

```
{
```

```
if(i*i > 30 )
```

```
goto lbl;
```

```
else
```

```
printf("%d",i);
```

```
lbl:
```

```
printf("IHelp ");
```

```
}
```

```
return 0;
```

```
}
```

Find the output

1.0IHelp 1IHelp 2IHelp 3IHelp 4IHelp

2.0IHelp 1IHelp 2IHelp 4IHelp

3.1IHelp

4.Error

Answer: 1

Q235: #include <stdio.h>

```
int main()
```

```
{
```

```
    int MAX=10;
```

```
    int array[MAX];
```

```
    printf("size of array is = %d",sizeof(array);
```

```
    return 0;
```

```
}
```

Find the output

1.size of array is = 20

2.size of array is = 40

3.size of array is = 4

4.Error

Answer: 2, else error because bracket missing

Q236: #include <stdio.h>

```
int main()
```

```
{  
  
int pn=100;  
  
if(pn>20)  
  
if(pn<20)  
  
printf("Heyyyyy");  
  
else  
  
printf("Hiiii");  
  
return 0;  
  
}
```

Find the output.

- 1.No output
- 2.Hiiii
- 3.Heyyyyy
- 4.HeyyyyyHiiii

Answer: 2

Q237: #include <stdio.h>

```
int main()  
  
{  
  
int var=100;  
  
{  
  
int var=200;
```

```
printf("%d...",var);  
  
}  
  
printf("%d",var);  
  
return 0;  
  
}
```

Find the output

- 1.ERROR
- 2.200...200
- 3.100...100
- 4.200...100

Answer: 4

Q238: #include <stdio.h>

```
int main()  
{  
    int var=250;  
    printf("value of var = %d\n",var);  
    200+50;  
    "includehelp.com";  
    printf("%s\n","includehelp");  
    return 0;  
}
```

Find the output

1.value of var = 250

includehelp.com

2.value of var = 250

includehelp

3.Error

4.value of var = 250

Garbage

Answer: 2

Q239: #include <stdio.h>

int main()

{

int iVal;

char cVal;

void *ptr; // void pointer

iVal=50; cVal=65;

ptr=&iVal;

printf("value =%d,size= %d\n",*(int*)ptr,sizeof(ptr));

ptr=&cVal;

```
printf("value =%d,size= %d\n",*(char*)ptr,sizeof(ptr));  
return 0;  
}
```

Find the output

1.Error

2.value =50,size= 4

value =65,size= 4

3.value =50,size= 4

value =65,size= 1

4.Garbage value

Answer: 2

Q240: #include <stdio.h>

```
int main()
```

```
{
```

```
static int var[5];
```

```
int count=0;
```

```
var[++count]=++count;
```

```
for(count=0;count<5;count++)
```

```
printf("%d ",var[count]);
```

```
return 0;
```

```
}
```

Find the output

1.0 1 0 0 0

2.0 2 0 0 0

3.0 0 2 0 0

4.0 0 0 0 0

Answer: 3

Q241: #include <stdio.h>

```
int main()
```

```
{
```

```
    struct sample{
```

```
        int a;
```

```
        int b;
```

```
        sample *s;
```

```
    }t;
```

```
    printf("%d,%d",sizeof(sample),sizeof(t.s));
```

```
    return 0;
```

```
}
```

Find the output

1.12, 12

2.12, 0

3.Error

4.12, 4

Answer: 3

Q242: #include <stdio.h>

```
int main()
```

```
{
```

```
    struct std
```

```
    {
```

```
        char name[30];
```

```
        int age;
```

```
    };
```

```
    struct std s1={"Mike",26};
```

```
    struct std s2=s1;
```

```
    printf("Name: %s, Age: %d\n",s2.name,s2.age);
```

```
}
```

Find the output

- 1.Name: Mike, Age: 26
- 2.Name: Garbage, Age: Garbage
- 3.Name: Null, Age: 26
- 4.Error

Answer: 1

Q243: #include <stdio.h>

```
int main()
```

```
{
```

```
    typedef struct tag{
```

```
        char str[10];
```

```
        int a;
```

```
    }har;
```

```
    har h1,h2={"IHelp",10};
```

```
    h1=h2;
```

```
    h1.str[1]='h';
```

```
    printf("%s,%d",h1.str,h1.a);
```

```
    return 0;
```

```
}
```


Find the output

1.ERROR

2.IHelp, 10

3.IHelp, 0

4.Ihelp, 10

Answer: 4

Q244: #include <stdio.h>

```
int main()
```

```
{
```

```
    union test
```

```
    {
```

```
        int i;
```

```
        int j;
```

```
    };
```

```
    union test var=10;
```

```
    printf("%d,%d\n",var.i,var.j);
```

```
}
```

Find the output

1.10,10

2.10,0

3.0,10

4.Error

Answer: 4

Q245: #include <stdio.h>

```
int main()
```

```
{
```

```
    union values
```

```
    {
```

```
        int intVal;
```

```
        char chrVal[2];
```

```
    };
```

```
    union values val;
```

```
    val.chrVal[0]='A'; val.chrVal[1]='B';
```

```
    printf("\n%c,%c,%d",val.chrVal[0],val.chrVal[1],val.intVal);
```

```
    return 0;
```

```
}
```

Find the output

1.A,B,0

2.A,B,16961

3.B,B,66

4.A,A,65

Answer: 2

Q246: #include <stdio.h>

int main()

{

union values

{

unsigned char a;

unsigned char b;

unsigned int c;

};

union values val;

val.a=1;

val.b=2;

val.c=300;

printf("%d,%d,%d",val.a,val.b,val.c);

return 0;

}

Find the output

1.44,44,300

2.1,2,300

3.2,2,300

4.256,256,300

Answer: 1

Q247: #include <stdio.h>

int main()

{

void *ptr;

++ptr;

printf("%u",ptr);

return 0;

}

Find the output

1.2004

2.2001

3.2000

4.ERROR

Answer: Answer is 1, B option seems most relevant

Q248: #include <stdio.h>

```
struct employee{
```

```
    int empld;
```

```
    char *name;
```

```
    int age;
```

```
};
```

```
int main()
```

```
{
```

```
    struct employee emp []={ {1,"Mike",24}, {2,"AAA",24}, {3,"BBB",25}, {4,"CCC",30} };
```

```
    printf("Id : %d, Age : %d, Name : %s", emp[2].empld,3[emp].age,(*(emp+1)).name);
```

```
    return 0;
```

```
}
```

Find the output

1.Id: 3, Age: 24, Name: Mike

2.Id: 3, Age: 23, Name: Mike

3.Id: 3, Age: 30, Name: AAA

4.Error

Answer: 3

Q249: #include <stdio.h>

void main()

{

int a=2;

switch(a)

{

printf("Message\n");

default:

printf("Default\n");

case 2:

printf("Case-2\n");

case 3:

printf("Case-3\n");

}

printf("Exit from switch\n");

}

Find the output

1.Case-2

2.Message

3.Message

Case-2

4.Case-2

Case-3

Exit from switch

Answer: 4

Q250: #include <stdio.h>

```
void main(){
```

```
    static int staticVar;
```

```
    int j;
```

```
    for(j=0;j<=5;j+=2)
```

```
    switch(j){
```

```
        case 1:
```

```
            staticVar++;
```

```
            break;
```

```
        case 2:
```

```
            staticVar+=2;
```

```
        case 4:
```

```
            staticVar%=2;
```

```
            j=-1;
```

```
            continue;
```

```
        default:
```

```
            --staticVar;
```

```
            continue;
```

```
    }
```

```
    printf("%d",staticVar);
```

```
}
```

Find the output

1.0

2.1

3.2

4.Error

Answer: 1)0

Q251: #include <stdio.h>

```
void main(){
```

```
    int a=0;
```

```
    a=5||2|1;
```

```
    printf("%d",a);
```

```
}
```

Find the output.

1.2

2.1

3.0

4.8

Answer: 2)1

Q252: #include <stdio.h>

```
void main(){  
  
    int a=1;  
  
    switch(a/2)  
  
    {  
  
    case NULL:  
  
        printf("Case NULL\n");  
  
        break;  
  
    case 0:  
  
        printf("Case ZERO\n");  
  
        break;  
  
    default:  
  
        printf("DEFAULT\n");  
  
        break;  
  
    }  
  
}
```

Find the output

- 1.Case NULL
- 2.Case ZERO
- 3.Case DEFAULT
- 4.Error

Answer: 4

Q253: #include <stdio.h>

void main()

{

int a=2;

int b=a;

switch(b)

{

case a:

printf("Case-a\n"); break;

case 3:

printf("Case-3\n"); break;

default:

printf("No option\n"); break;

}

printf("Exit from switch");

}

Find the output

1.Case-2

2.Error: case expression not constant

3.Message

Case-2

4.Case-2

Case-3

Exit from switch

Answer: 2

Q254: #include <stdio.h>

void main()

{

int cnt=1;

while(cnt<=10)

{

printf("%d,",cnt);

cnt+=1;

}

printf("\nAfter loop cnt=%d",cnt);

printf("\n");

}

Find the output

1.After loop cnt= 1

2.1,

After loop cnt= 2

3.After loop cnt= 2

4.11

Answer: 1

Q255: #include <stdio.h>

void main()

{

int i,j,charVal='A';

for(i=5;i>=1;i--)

{

for(j=0;j< i;j++)

printf("%c ",(charVal+j));

printf("\n");

}

}

Identify the output

1.A B C D E

A B C D E

A B C D E

A B C D E

A B C D E

2.A B C D

A B C D

A B C D

A B C D

3.A B C D

A B C

A B

A

4.A B C D E

A B C D

A B C

A B

A

Answer: 4.A B C D E

A B C D

A B C

A B

A

Q256: #include <stdio.h>

void main()

{

int i=1;

while (i<=5)

{

printf("%d",i);

```

if (i==5)

goto print;

i++;

}

}

fun()

{

print:

printf("includehelp.com");

}

```

Find the output

- 1.Error
- 2.12345includehelp.com
- 3.1234includehelp.com
- 4.1includehelp.com 2includehelp.com 3includehelp.com 4includehelp.com 5includehelp.com

Answer: 1.Error

Q257: #include <stdio.h>

```

void main(){

int intVar=20,x;

x= ++intVar,intVar++,++intVar;

printf("Value of intVar=%d, x=%d",intVar,x);

```

```
}
```

Find the output

1.Value of intVar=23, x=21

2.Value of intVar=23, x=23

3.Value of intVar=21, x=21

4.ERROR

Answer: 1.Value of intVar=23, x=21

Q258: #include <stdio.h>

```
void main()
```

```
{
```

```
    int tally;
```

```
    for(tally=0;tally<10;++tally)
```

```
    {
```

```
        printf("#");
```

```
        if(tally>6)
```

```
            continue;
```

```
        printf("%d",tally);
```

```
    }
```

```
}
```

Find the output

1.#0#1#2#3#4#5#6###

2.#0#1#2#3#4#5#6#7#8#9#10

3.#0#1#2#3#4#5##7#8#9#10

4.#0#1#2#3#4#5#

Answer: 1.#0#1#2#3#4#5#6###

Q259: #include <stdio.h>

```
void main(){
```

```
    unsigned char c=290;
```

```
    printf("%d",c);
```

```
}
```

Find the output

1.34

2.290

3.Garbage value

4.Error

Answer: 1.34

Q260: #include <stdio.h>

void main()

{

char cnt=0;

for(;cnt++;printf("%d",cnt)) ;

printf("%d",cnt);

}

Find the output

1.0 1 2 ... infinity

2.1 2 2 ... 127

3.0

4.1

Answer: 4.1

Q261: #include <stdio.h>

#include <string.h>

int main()

{

```
char str[];  
strcpy(str,"Hello");  
printf("%s",str);  
return 0;  
}
```

Find the output

- 1.Hello
- 2.Error
- 3.NULL
- 4.NO OUTPUT

Answer: 2.Error

Q262: #include

```
#define SUM(x,y) int s; s=x+y; printf("sum=%d\n",s);  
int main()  
{  
    SUM(10,20);  
    return 0;  
}
```

Find the output

1.sum=30

2.10,20

3.Error

4.sum=0

Answer: 1.sum=30

Q263: #include

```
int main()
```

```
{
```

```
    char ch=10;
```

```
    void *ptr=&ch;
```

```
    printf("%d,%d",*(char*)ptr,++(*(char*)ptr));
```

```
    return 0;
```

```
}
```

Find the output

1.11, 11

2.10, 11

3.Error

4.10, 10

Answer: 1.11,11

Q264: #include

```
int main()

{

char *str []={"AAAAA","BBBBB","CCCCC","DDDDD"};

char **sptr []={str+3,str+2,str+1,str};

char ***pp;


pp=sptr;

++pp;

printf("%s",**++pp+2);

return 0;

}
```

Find the output

- 1.BBBBB
- 2.CCCCC
- 3.BBB
- 4.Error

Answer: 3.BBB

Q265: #include

```
int main()

{
```

```
int a=10,b=2;

int *pa=&a,*pb=&b;

printf("value = %d", *pa/*pb);

return 0;

}
```

Find the output

1.5

2.5.0

3.ERROR

4.No output

Answer: 3.ERROR

Q266: #include

```
void fun(int *ptr)
```

```
{
```

```
    *ptr=100;
```

```
}
```

```
int main()
```

```
{
```

```
    int num=50;
```

```
    int *pp=#
```

```
    fun(& *pp);
```

```
printf("%d,%d",num,*pp);  
  
return 0;  
  
}
```

Find the output

1.100,100

2.50,50

3.50,100

4.Error in function calling

Answer: 4. Error in function calling

Q267: #include

```
#define FUN(x) x*x
```

```
int main()
```

```
{
```

```
int val=0;
```

```
val=128/FUN(8);
```

```
printf("val=%d",val);
```

```
return 0;
```

```
}
```

Find the output

1.2

2.12864

3.40

4.1

Answer: Ans not matching , compiler gives val=128

Q268: #include

int main ()

{

static int a[]={10, 20, 30 40, 50};

static int *p[]={a, a+3, a+4, a+1, a+2};

int **ptr=p;

ptr++;

printf ("%d%d", ptr p, **ptr);

}

The output of the program is _____

1.43

2.140

3.89

4.78

Answer: 2.14

Q269: #include <stdio.h>

#define TRUE 1

int main()

{

switch(TRUE)

{

printf("Hello");

}

}

Find the output

1.Hello

2.ERROR

3.No output

4.Garbage

Answer: 3. No output

Q270: #include <stdio.h>

enum numbers

{

zero, one, two, three , four=3,five,six,seven=0,eight

};

void main()

{

printf("%d,%d,%d,%d,%d,%d,%d,%d,%d",zero,one,two,three,four,five,six,seven,eight);

}

What will be the output.

1.0, 1, 2, 3, 3, 4, 5, 0, 1

2.0, 1, 2,3,3,1,2,3,4

3.0,1,2,3,3,1,2,3,4

4.0, 1, 2, 3, 3, 4, 5, 0, 9

Answer: 1.0,1,2,3,3,4,5,0,1

Q271: #include <stdio.h>

```
int main(){
```

```
    char val=250;
```

```
    int ans;
```

```
    ans= val+ !val + ~val + ++val;
```

```
    printf("%d",ans);
```

```
    return 0;
```

```
}
```

Find the output.

1.-5

2.-6

3.0

4.6

Answer: 2.-6

Q272: #include <stdio.h>

```
int main()
```

```
{
```

```
float a,b;
```

```
a=3.0f;
```

```
b=4.0f;
```

```
printf("%.0f,%.1f,%.2f",a/b,a/b,a/b);
```

```
return 0;
```

```
}
```

Find the output.

1.1, 0.8, 0.75

2.0, 0.7, 0.75

3.0, 0.8, 0.75

4.Error: Invalid format Specifier

Answer: 1.1,0.8,0.75

Q273: #include <stdio.h>

```
int main(){
```

```
float a;
```

```
(int)a= 10;  
printf("value of a=%d",a);  
return 0;  
}
```

Find the output

- 1.value of a=10
- 2.value of a=10.000000
- 3.value of a=0
- 4.L-Value required

Answer: 4.L-Value required

Q274: #include <stdio.h>

```
int main()  
{  
    int i=-1,j=-1,k=0,l=2,m;  
    m=i++&&j++&&k++||l++;  
    printf("%d %d %d %d %d",i,j,k,l,m);  
    return 0;  
}
```

Find the output

1.0 0 1 2 1

2.0 0 1 3 2

3.0 0 1 3 1

4.0 1 1 3 1

Answer: 3.0 0 1 3 1

Q275: #include <stdio.h>

int main()

{

int intVar=24;

static int x=intVar;

printf("%d,%d",intVar,x);

return 0;

}

Find the output of this program, (program name is: static_ec.c)

1.24, 24

2.24, 0

3.Error: Illegal Initialization

4.Run time error

Answer: 3.Error: Illegal Initialization

Q276: #include <stdio.h>

```
int main()
{
    int ok=-100;
    -100;
    printf("%d",ok);
    return 0;
}
```

Find the output.

1.0

2.-100

3.100

4.Error

Answer: 2.-100

Q277: #include <stdio.h>

```
int main()
{
    int var;
    var=- -10;
    printf("value of var= %d\n",var);
    var=+ +10;
```

```
printf("value of var= %d\n",var);  
  
return 0;  
  
}
```

Find the output

1.ERROR

2.value of var= -10

value of var= 10

3.value of var= 10

value of var= 10

4.value of var= 10

value of var= 11

Answer: 3.value of var= 10

value of var= 10

Q278: #include <stdio.h>

```
int main(){
```

```
    int x;
```

```
    x=100,30,50;
```

```
    printf("x=%d\n",x);
```

```
    x=(100,30,50);
```

```
    printf("x=%d\n",x);
```

```
return 0;  
}
```

Find the output

1.x=100

x=100

2.x=100

x=50

3.x=50

x=50

4.x=50

x=100

Answer: 2.x=100

x=50

Q279: #include <stdio.h>

void main()

{

int a=10;

switch(a){

case 5+5:

printf("Hello\n");

default:

printf("OK\n");

}

```
}
```

Find the output

1.Hello

2.OK

3.Hello

OK

4.Error

Answer: 3. Hello OK

Q280: #include <stdio.h>

```
void main()
```

```
{
```

```
    unsigned short var='B';
```

```
    var+=2;
```

```
    var++;
```

```
    printf("var : %c , %d ", var,var);
```

```
}
```

Find the output

1.var : E, 69

2.var : E, 68

3.var : D, 69

4.var : D, 68

Answer: 1.var : E , 69

Q281: #include <stdio.h>

void main()

{

int a=2;

switch(a/2*1.5)

{

case 1:

printf("One...");

break;

case 2:

printf("Two...");

break;

default:

printf("Other...");

break;

}

}

Find the output

1.One...

2.Two...

3.Other...

4.Error

Answer: 4.Error

Q282: #include <stdio.h>

```
void main()
```

```
{
```

```
    short a=2;
```

```
    switch(a)
```

```
    {
```

```
        case 1L:
```

```
            printf("One\n");
```

```
            break;
```

```
        case 2L:
```

```
            printf("Two\n");
```

```
            break;
```

```
        default:
```

```
            printf("Else\n");
```

```
            break;
```

```
    }
```

```
}
```

Find the output

- 1.One
- 2.Two
- 3.Else
- 4.Error

Answer: 2.TWO

Q283: #include <stdio.h>

```
void main()
```

```
{
```

```
    short day=2;
```

```
    switch(day)
```

```
    {
```

```
        case 2: || case 22:
```

```
            printf("%d nd",day);
```

```
            break;
```

```
        default:
```

```
            printf("%d th",day);
```

```
            break;
```

```
    }
```

```
}
```

Find the output

- 1.2 nd
- 2.22 nd
- 3.Error

4.2 nd

22 nd

Answer: 3.Error

Q284: #include <stdio.h>

```
int main(){
```

```
    int a,b,c;
```

```
    a=0x10; b=010;
```

```
    c=a+b;
```

```
    printf("\nAddition is= %d",c);
```

```
    return 0;
```

```
}
```

Find the output.

1.Addition is = 20

2.Addition is = 24

3.Addition is = Garbage

4.Error

Answer: 2.Addition is= 24

Q285: #include <stdio.h>

void main()

{

int x;

x= (printf("AA")||printf("BB"));

printf("%d",x);

printf("\n");

x= (printf("AA")&&printf("BB"));

printf("%d",x);

}

Find the output

1.AABB1

AABB1

2.1

1

3.AABB1

AA1

4.AA1

AABB1

Answer: 4.AA1

AABB1

Q286: \$a = array(null => 'a', true => 'b', false => 'c', 0 => 'd', 1 => 'e', '' => 'f'); echo count(\$a), "\n";

What will be printed?

1.2 2.3 3.4 4.5

Answer: 2.3

Q287: \$a = array(); if (\$a[1]) null; echo count(\$a), "\n"; What will be printed?

1.0 2.1 3.2 4.Code wont work

Answer: 1

Q288: What is the most common approach for the development of application system now?

1.Incremental development

2.Agile

3.Waterfall

4.None of the options

Answer: 1.Incremental development

Q289: data type can store unstructured data

1.RAW

2.CHAR

3.NUMERIC

4.VARCHAR

Answer: 1.RAW

Q290: A wireless network interface controller can work in

1.infrastructure mode

2.ad-hoc mode

3.both infrastructure and ad-hoc mode

4.none

Answer: 3.both infrastructure & ad-hoc

Q291: Consider the code snippet given below

```
var count = [1,,3];
```

What is the observation made?

1.The omitted value takes "undefined"

2.This results in an error

3.This results in an exception

4.Can't predict

Answer: 1.The omitted value takes "undefined"

Q292: Consider the following javascript statements

```
x = ~-y;
```

```
w = x = y = z;
```

```
q = a?b:c?d:e?f:g;
```

The above code snippet is equivalent to:

1.x = ~(-y); w = (x = (y = z));

q = a?b:(c?d:(e?f:g));

2.x = a?b:(c?d:(e?f:g));

$q = \sim(-y); w = (x = (y = z));$

3. $x = (x = (y = z)); w = \sim(-y);$

$q = a?b:(c?d:(e?f:g));$

4. $x = \sim(-y); w = (x = (y = z));$

$q = (c?d:(e?f:g));$

Answer: 1. $x = \sim(-y); w = (x = (y = z));$

$q = a?b:(c?d:(e?f:g));$

Q293: Consider the following statements

```
var text = "testing: 1, 2, 3"; // Sample text
```

```
var pattern = /\d+/g // Matches all instances of one or more digits
```

In order to check if the pattern matches with the string "text", the statement is

1. `text==pattern`

2. `text.equals(pattern)`

3. `text.test(pattern)`

4. `pattern.test(text)`

Answer: 4. `pattern.test(text)`

Q294: ----- is the minimal super key

1. Partial Key

2.Candidate Key

3.Surrogate Key

4.Unique Key

Answer: 2.Candidate Key

Q295: ----- is a built - in JavaScript function which can be used to execute another function after a given time interval.

1.Timeout() 2.TimeInterval() 3.setTimeout () 4.All of the above

Answer: 3.setTimeout ()

Q296: command can be used to modify a column in a table

1.alter

2.update

3.set

4.create

Answer: 1.alter

Q297: is preferred method for enforcing data integrity

1.Constraints

2.Stored Procedure

3.Triggers

4.Cursors

Answer: 1.Constraints

Q298: 66.6% risk is considered as

1.very low

2.low

3.moderate

4.high

Answer: 4.high

Q299: 8086 microprocessor is interfaced to 8253 a programmable interval timer. The maximum number by which the clock frequency on one of the timers is divided by

1.216 2.28 3.210 4.220

Answer: 1.216

Q300: Which activity most easily lends itself to incremental design?

- 1.User Interfaces
- 2.Web Services
- 3.Enterprise resource planning
- 4.Embedded Software

Answer: 3.Enterprise resource planning

Q301: 1. Graphical representation of the project, showing each task and activity as horizontal bar whose length is proportion to time taken for a completion of that activity is called

- 1.Gantt Chart 2.Structure Chart
- 3.Pert Chart
- 4.Time Line

Answer: 1.Gantt Chart

Q302: 1. Software deteriorates rather than wears out because

- 1.Software suffers from exposure to hostile environments
- 2.Defects are more likely to arise after software has been used often
- 3.Multiple change requests introduce errors in component interactions
- 4.Software spare parts become harder to order

Answer: 3.Multiple change requests introduce errors in c

Q303: 1. The 40-20-40 rule suggests that the least amount of development effort can be spent on

- 1.Estimation and planning
- 2.Analysis and design
- 3.Coding
- 4.Testing

Answer: 3.Coding

Q304: 1. The prototyping model of software development is

- 1.A reasonable approach when requirements are well defined
- 2.A Useful approach when a customer cannot define requirements clearly
- 3.The best approach to use projects with larger development teams
- 4.A risky model that rarely produces a meaningful product

Answer: 2

Q305: In reuse-oriented software engineering the last stage is _____.

- 1.component analysis
- 2.requirements modification
- 3.system validation
- 4.system design

Answer: 3. system validation

Q306: Which of the following is not a part/product of requirements engineering?

1.Feasibility study

2.Requirements validation

3.System models

4.Architectural design

Answer: 4. Architectural Design

Q307: 1. Software Specification is the process where

1. you decide what software you will use to program
2. you develop a prototype and show it to the client
- 3.You find out what services are required from the system
4. none

Answer: 3

Q308: 1. What is an advantage of incremental delivery?

1. everything is coded at once, so the customer receives the full product
2. replacement systems are easily developed with full features that clients expected from the old system
3. Customers can use prototypes and gain experience that informs their requirements for later

systems

4.none of the mentioned

Answer: 3

Q309: 1. This is a software development process model

1.waterfall model 2.Incremental model

3.Boehm's Spiral model

4.all

Answer: 4.all

Q310: 1. What is the type of software design that defines interfaces between system components?

1. architectural design

2.Interface Design

3. component Design

4.database design

Answer: 3

Q311: The size of the data count register of a DMA controller is 16 bits. The processor needs to transfer a file of 29,154 kilobytes from disk to main memory. The memory is byte addressable. The

minimum number of times the DMA controller needs to get the control of the system bus from the processor to transfer the file from the disk to main memory is

1.454

2.455

3.456

4.457

Answer: 3

Q312: For which of the following flip-flop the output clearly defined for all combinations of two inputs?

1.D type flip-flop

2.R S type flip-flop

3.J K flip-flop

4.T flip-flop

Answer: 3

Q313: In excitation table of D flipflop next state is equal to

1.Next State

2.Present State

3.Previous State

4.D State

Answer: 4

Q314: A computer system implements 8 kilobyte pages and a +32-bit physical address space. Each page table entry contains a valid bit, a dirty bit, three permission bits, and the translation. If the maximum size of the page table of a process is 24 megabytes, the length of the virtual address supported by the system is _____ bits.

1.33

2.35

3.34

4.36

Answer: 4

Q315: A graphical display of the fundamental products in a truth-table is known as

1.Mapping

2.Graphing

3.T-map

4.Karnaugh-Map

Answer: 4

Q316: A processor can support a maximum memory of 4 GB, where the memory is word-addressable (a word consists of two bytes). The size of the address bus of the processor is at least _____ bits

1.30

2.31

3.32

4.33

Answer: 2

Q317: A Stack-organized Computer uses instruction of

1. Indirect addressing

2. Two-addressing

3. Zero addressing

4. Index addressing

Answer: 3

Q318: A 4-way set-associative cache memory unit with a capacity of 16 KB is built using a block size of 8 words. The word length is 32 bits. The size of the physical address space is 4 GB. The

number of bits for the TAG field is

1.19

2.20

3.21

4.22

Answer: 2

Q319: A circuit that converts n inputs to 2^n outputs is called

1.Encoder

2.Decoder

3.Comparator

4.Carry Look Ahead

Answer: 2

Q320: A Program Counter contains a number 825 and address part of the instruction contains the

number 24. The effective address in the relative address mode, when an instruction is read from the memory is

1.849

2.850

3.801

4.802

Answer: 2

Q321: Buffering is useful because

1.It makes it seem like there's more memory in the computer

2.It reduces the number of memory copies required

3.It allows all device drivers to use the same code

4. It allows devices and the CPU to operate asynchronously

Answer: 4

Q322: Consider a 6-stage instruction pipeline, where all stages are perfectly balanced. Assume that there is no cycle-time overhead of pipelining. When an application is executing on this 6-stage pipeline, the speedup achieved with respect to non-pipelined execution if 25% of the instructions incur 2 pipeline stall cycles is

1.1

2.2

3.4

4.5

Answer: 3

Q323: Consider a join (relation algebra) between relations $r(R)$ and $s(S)$ using the nested loop method. There are 3 buffers each of size equal to disk block size, out of which one buffer is reserved for intermediate results. Assuming $\text{size}(r(R))$

1. Relation $r(R)$ is in the outer loop.

2.Relation $s(S)$ is in the outer loop.

3.Join selection factor between $r(R)$ and $s(S)$ is more than 0.5

4.Join selection factor between $r(R)$ and $s(S)$ is less than 0.5.

Answer: 1

Q324: Consider a main memory system that consists of 8 memory modules attached to the system bus, which is one word wide. When a write request is made, the bus is occupied for 100 nanoseconds (ns) by the data, address, and control signals. During the same 100 ns, and for 500 ns thereafter, the addressed memory module executes one cycle accepting and storing the data. The (internal) operation of different memory modules may overlap in time, but only one request can be on the bus at any time. The maximum number of stores (of one word each) that can be initiated in 1 millisecond is

1.5535

2.65335

3.53892

4.10000

Answer: 4

Q325: Consider two processors P1 and P2 executing the same instruction set. Assume that under identical conditions, for the same input, a program running on P2 takes 25% less time but incurs 20% more CPI (clock cycles per instruction) as compared to the program running on P1. If the clock frequency of P1 is 1GHz, then the clock frequency of P2 (in GHz) is

1.1.5

2.1.6

3.1.7

4.1.8

Answer: 2

Q326: Content of the program counter is added to the address part of the instruction in order to obtain the effective address is called

1.relative address mode.

2.index addressing mode.

3.register mode

4.implicit mode

Answer: 1

Q327: How many address bits are needed to select all memory locations in the 16K x 1 RAM?

1.8

2.10

3.14

4.16

Answer: 3

Q328: If the associativity of a processor cache is doubled while keeping the capacity and block size unchanged, which one of the following is guaranteed to be NOT affected?

1.Width of tag comparator

2.Width of set index decoder

3.Width of way selection multiplexer

4.Width of processor to main memory data bus

Answer: 4

Q329: If the main memory is of 8K bytes and the cache memory is of 2K words. It uses associative mapping. Then each word of cache memory shall be_____.

1.11 bits

2.21 bits

3.16 bits

4.20 bits

Answer: 3

Q330: If two interrupts, one of higher priority and other of lower priority occur simultaneously, then the service provided is for

1.interrupt of lower priority

2.interrupt of higher priority

3.both the interrupts

4.none of the mentioned

Answer: 2

Q331: Minterms are arranged in map in a sequence of

1.binary sequence

2.gray code

3.binary variables

4.BCD code

Answer: 2

Q332: Register renaming is done in pipelined processors

- 1.As an alternative to register allocation at compile time
- 2.For efficient access to function parameters and local variables
- 3.To handle certain kinds of hazards
- 4.As part of address translation

Answer: 3

Q333: Simplified form of the boolean expression $(X + Y + XY)(X + Z)$ is

1. $X + Y + Z$
2. $XY + YZ$
3. $X + YZ$
4. $XZ + Y$

Answer: 3

Q334: The 16-bit 2's complement representation of an integer is 1111 1111 1111 0101, its decimal

representation is

1.1

2.2

3.3

4.-11

Answer: 4

Q335: The addressing mode used in an instruction of the form ADD R1, R2 is _____.

1.Absolute

2.Indirect

3.Index

4.Register

Answer: 1

Q336: The capacity of a memory unit is defined by the number of words multiplied by the number of

bits/word. How many separate address and data lines are needed for a memory of 4 K x 16?

1.10 address, 16 data lines

2.11 address, 8 data lines

3.12 address, 12 data lines

4.12 address, 16 data lines

Answer: 4

Q337: The data-in register of I/O port is

1.read by host to get input

2.read by controller to get input

3.written by host to send output

4.written by host to start a command

Answer: 4

Q338: The Firmware are stored in read-only memory or _____ chips.

1. Flash memory
2. Dynamic random access memory
3. EEPROM
4. Random-access memory

Answer: 3

Q339: The performance of cache memory is frequently measured in terms of a quantity called

1. hit ratio
2. miss ratio
3. average ratio
4. ratio

Answer: 1

Q340: The smallest integer that can be represented by an 8-bit number in 2's complement form is

1. -256

2. -128

3. -127

4. 1

Answer: 2

Q341: The main difference between JK and RS flip-flop is that

1. JK flip flop needs a clock pulse

2. There is a feedback in JK flip-flop

3. JK flip-flop accepts both inputs as 1

4. JK flip-flop is acronym of Junction cathode multi-vibrator

Answer: 3

Q342: The rate at which a computer clock deviates from a perfect reference clock is called as

1.Clock rate

2.Clock speed

3.clock drift rate

4.Transmission Bandwidth

Answer: 3

Q343: The width of the physical address on a machine is 40 bits. The width of the tag field in a 512 KB 8-way set associative cache is _____ bits

1.21

2.22

3.23

4.24

Answer: 4

Q344: To build a mod-19 counter the number of flip-flops required is

1.3

2.5

3.7

4.9

Answer: 2

Q345: Using 10's complement $72532 - 3250$ is

1.69282

2.69272

3.69252

4. 69232

Answer: 1

Q346: What is the main difference between traps and interrupts?

- 1.How they are initiated
- 2.The kind of code that's used to handle them
- 3.Whether or not the scheduler is called
- 4.How the operating system returns from them

Answer: 1

Q347: When an instruction is read from the memory, it is called

- 1.Memory Read cycle
- 2.Fetch cycle
- 3.Instruction cycle
- 4.Memory write cycle

Answer: 2

Q348: Which amongst the following refers to Absolute addressing mode

1.move R1, R2

2.move LOC1, LOC2

3.move LOC1, R2

4.move LOC2, R1

Answer: nan

Q349: Which level of RAID refers to disk mirroring with block striping?

1.RAID level 1

2.RAID level 2

3.RAID level 0

4.RAID level 3

Answer: 1

Q350: Which of the following logic expression is incorrect?

1.1 $0 = 1$

2.1 $1 \ 0 = 1$

3.1 $1 \ 1 = 1$

4.1 $1 = 0$

Answer: 2

Q351: Which of the following paging algorithms is most likely to be used in a virtual memory system?

1.FIFO

2.Second chance

3.Least Recently Used

4.Least Frequently Used

Answer: 1

Q352: Which one of the following connects high-speed high-bandwidth device to memory subsystem and CPU.

1.expansion bus

2.PCI bus

3.SCSI bus

4.none of the mentioned

Answer: 2

Q353: Which one of these is characteristic of RAID 5?

1.Distributed parity

2.No Parity

3.All parity in a single disk

4.Double Parity

Answer: 1

Q354: Which two RAID types use parity for data protection?

1.RAID 1

2.RAID 4

3.RAID 1+0

4.RAID 5

Answer: 2022-02-04 00:00:00

Q355: X=1010100 and Y=1000011 using 1's complement Y-X is

1.-10111

2.-10011

3.-10001

4.-11001

Answer: 3

Q356: The minimum number of NAND gates required to implement the Boolean function. $A + AB' + AB'C$ is equal to

1.Zero

2.1

3.4

4.7

Answer: 1

Q357: Which of the following boolean expressions is not logically equivalent to all of the rest ?

1. $ab + (cd)' + cd + bd'$

2. $a(b + c) + cd$

3. $ab + ac + (cd)'$

$$4. bd' + c'd' + ab + cd$$

Answer: 1 not sure

Q358: Which of the following unit will choose to transform decimal number to binary code ?

1. Encoder

2. Decoder

3. Multiplexer

4. Counter

Answer: 1

Q359: If the associativity of a processor cache is doubled while keeping the capacity and block size unchanged, which one of the following is guaranteed to be NOT affected?

1. Width of tag comparator

2. Width of set index decoder

3. Width of way selection multiplexer

4.Width of processor to main memory data bus

Answer: 4

Q360: The correspondence between the main memory blocks and those in the cache is given by

1.Hash function

2.Mapping function

3.Locale function

4.Assign function

Answer: 2

Q361: The stage delays in a 4-stage pipeline are 800, 500, 400 and 300 picoseconds. The first stage (with delay 800 picoseconds) is replaced with a functionally equivalent design involving two stages with respective delays 600 and 350 picoseconds. The throughput increase of the pipeline is _____ percent.

1.33

2.34

3.35

4.32

Answer: 1 / 2 ans is 33.33%

Q362: What is the software that runs a computer, including scheduling tasks, managing storage, and handling communication with peripherals?

1.driver

2.application suitex

3.operating system

4.bluetooth technology

Answer: 3

Q363: For an undirected graph with n vertices and e edges, the sum of the degree of each vertex is equal to

1. $2n$

2. $(2n-1)/2$

3. $2e$

4. $\text{pow}(e,2)/2$

Answer: 3

Q364: Which attribute is used to extend the lifetime of a cookie?

1. higher-age

2. increase-age

3. max-age

4. lifetime

Answer: 3

Q365: `<h2 style="color:blue">I am Blue</h2>` is _____ way of styling HTML elements

1. Internal Style

2. Inline Style

3. External Style

4. Default

Answer: 2. Inline Style

Q366: _____ is referred to as Static Web

1.Web 1.0

2.Web 2.0

3.Web 3.0

4.Web 4.0

Answer: 1. Web 1.0

Q367: A priority queue is implemented as a Max-Heap. Initially, it has 5 elements. The level-order traversal of the heap is: 10, 8, 5, 3, 2. Two new elements 1 and 7 are inserted into the heap in that order. The level-order traversal of the heap after the insertion of the elements is:

1.10, 8, 7, 3, 2, 1, 5

2. 10, 8, 7, 2, 3, 1, 5

3.10, 8, 7, 1, 2, 3, 5

4.10, 8, 7, 5, 3, 2, 1

Answer: 4. 10, 8, 7, 3, 2, 1, 5

Q368: A binary tree in which if all its levels except possibly the last, have the maximum number of

nodes and all the nodes at the last level appear as far left as possible, is known as

- 1.full binary tree
- 2.AVL tree
- 3.threaded tree
- 4.complete binary tree

Answer: 4. complete binary tree

Q369: A binary tree T has 20 leaves. The number of nodes in T having two children is

- 1.34
- 2.99
- 3.7
- 4.19

Answer: 2022-04-19 00:00:00

Q370: A process executes the code

```
fork ();
```

```
fork ();
```

```
fork ();
```

The total number of child processes created is

- 1.3

2.4

3.7

4.8

Answer: 2022-03-07 00:00:00

Q371: A Search engine can serve as

1. both as a server and a client

2. As Client always

3. As Server always

4. Neither client nor server

Answer: 3. As server always

Q372: An object of class A receives a message with an argument that is an instance of class B.

Identify the type of relationship between class A and Class B:

1.Generalization

2.Association

3.Aggregation

4.Realization

Answer: nan

Q373: Consider an undirected graph G where self-loops are not allowed. The vertex set of G is $\{(i, j): 1 \leq i \leq 12, 1 \leq j \leq 12\}$. There is an edge between (a, b) and (c, d) if $|a - c| = 1$ and $|b - d| = 1$. The number of edges in this graph is

1.505

2.506

3.507

4.508

Answer: 2. 506

Q374: Consider an undirected random graph of eight vertices. The probability that there is an edge between a pair of vertices is $1/2$. What is the expected number of unordered cycles of length three?

1.1/8

2.1

3.7

4.8

Answer: 2022-03-07 00:00:00

Q375: Consider the C function given below.

```
int f(int j)
{
    static int i = 50;
    int k;
    if (i == j)
    {
        printf("something");
        k = f(i);
        return 0;
    }
    else return 0;
}
```

Which one of the following is TRUE?

1.The function returns 0 for all values of j.

2.The function prints the string something for all values of j.

3.The function returns 0 when j = 50.

4.The function will exhaust the runtime stack or run into an infinite loop when j = 50.

Answer: 4. The function will exhaust the runtime stack or run into an infinite loop when j = 50

Q376: Consider the following function written the C programming language.

```
void foo (char * a ) {  
    if (* a & & * a != ' '){  
        putchar (*a);  
    }  
}  
}
```

The output of the above function on input 'ABCD EFGH' is

1.ABCD EFGH

2.ABCD

3.HGFE DCBA

4.DCBA

Answer: 4. DCBA

Q377: Consider the following New-order strategy for traversing a binary tree:

- 1)Visit the root;
- 2)Visit the right subtree using New-order;
- 3)Visit the left subtree using New-order;

The New-order traversal of the expression tree corresponding to the reverse polish expression $3\ 4\ *\ 5\ -\ 2\ ?\ 6\ 7\ *\ 1\ +\ -$ is given by:

1. $+ - 1\ 6\ 7\ *\ 2\ ?\ 5 - 3\ 4\ *$

2. $.. - + 1\ * 6\ 7\ ?\ 2 - 5\ * 3\ 4$

3. $- + 1\ * 7\ 6\ ?\ 2 - 5\ * 4\ 3$

4. $.. 1\ 7\ 6\ * + 2\ 5\ 4\ 3\ * - ? -$

Answer: 3. $- + 1\ * 7\ 6\ ^2 - 5\ * 4\ 3$

Q378: Consider the following program:

```
int f(int *p, int n)
{
    if (n <= 1) return 0;
    else return max ( f (p+1, n-1), p[0]-p[1]);
}

int main()
{
    int a[] = {3,5,2,6,4};
    printf("%d", f(a,5));
}
```

The value printed by this program is

1.2

2.1

3.3

4.4

Answer: 2022-03-03 00:00:00

Q379: Consider the following recursive C function.

```
Void get (int n)
{if (n<1) return;
  get (n-1)
  get (n-3) ;
  printf ("%d",n);
}
```

If get(6) function is being called in main () then how many times will the get() function be invoked before returning to the main () ?

1.15

2.25

3.43

4.24

Answer: 2022-02-25 00:00:00

Q380: Consider the function func shown below:

```
int func(int num) {  
  
    int count = 0;  
  
    while (num) {  
  
        count++;  
  
        num>>= 1;  
  
    }  
  
    return (count);  
}
```

The value returned by func(435)is

1.7

2.8

3.9

4.0

Answer: 2022-03-09 00:00:00

Q381: For the array (77 ,62,114,80,9,30,99), write the order of the elements after two passes using the Radix sort

1.80 30 62 114 77 9 99

2.114 30 62 77 9 99

3.9 114 30 62 77 80 99

4.9 30 62 77 80 99 114

Answer: nan

Q382: How can you make a list that lists the items with numbers?

1.<list>

2.

3.<dl>

4.

Answer: 2.

Q383: How do you write "Hello World" in PHP?

1. using System.out.println
- 2.using Document.Write("Hello World")
- 3."Hello World"

4.using echo("Hello World")

Answer: 4. using echo("Hello World")

Q384: HTTP is implemented over

- 1.UDP
- 2.TCP
- 3.SMTP
- 4.POP

Answer: 2. TCP

Q385: If every node u in G adjacent to every other node v in G , A graph is said to be

- 1.isolated
- 2.complete
- 3.finite
- 4.strongly connected

Answer: 2. complete

Q386: In a connected graph, a bridge is an edge whose removal disconnects a graph. Which one of the following statements is true?

- 1.A tree has no bridges
- 2.A bridge cannot be part of a simple cycle
- 3.Every edge of a clique with size 3 is a bridge (A clique is any complete sub graph of a graph)
- 4.A graph with bridges cannot have a cycle

Answer: 2. A bridge cannot be part of a simple cycle

Q387: In HTTP, which method gets the resource as specified in the URI

- 1.GET
- 2.POST
- 3.PUT
- 4.TRACE

Answer: 1. GET

Q388: Java package is a grouping mechanism with the purpose of

- 1.Providing the library for the Java program
- 2.Controlling the visibility of the classes, interfaces and methods

3.Replacing header file used in C/C++

4.An application framework

Answer: 2. Controlling the visibility of the classes, interfaces and methods

Q389: Suppose a circular queue of capacity $(n - 1)$ elements is implemented with an array of n elements. Assume that the insertion and deletion operations are carried out using REAR and FRONT as array index variables, respectively. Initially, $\text{REAR} = \text{FRONT} = 0$. The conditions to detect queue full and queue empty are

1.full: $(\text{REAR} + 1) \bmod n == \text{FRONT}$

empty: $\text{REAR} == \text{FRONT}$

2. $(\text{REAR}) \bmod n == \text{FRONT}$

empty: $\text{REAR} == \text{FRONT}$

3. $(\text{REAR} + 1) \bmod n == \text{Rear}$

empty: $\text{REAR} == \text{FRONT}$

4.full: $(\text{FRONT} + 1) \bmod n == \text{FRONT}$

empty: $\text{REAR} == \text{FRONT}$

Answer: 1.full: $(\text{REAR}+1) \bmod n == \text{FRONT}$

empty: $\text{REAR} == \text{FRONT}$

Q390: The following function computes the maximum value contained in an integer array

$p[]$ of size n ($n \geq 1$).

```
int max(int *p, int n) {  
    int a=0, b=n-1;  
    while (_____) {  
        if (p[a] <= p[b]) { a = a+1; }  
        else { b = b-1; }  
    }  
    return p[a];  
}
```

The missing loop condition is

1. $a \neq n$

2. $b \neq 0$

3. $b > (a+1)$

4. $b \neq a$

Answer: 4. $b \neq a$

Q391: The following HTML element helps making animated text

1. ``

2.<ins>

3.<mark>

4.<marquee>

Answer: 4. <marquee>

Q392: The number of ways in which the numbers 1, 2, 3, 4, 5, 6, 7 can be inserted in an empty binary search tree, such that the resulting tree has height 6, is

1.63

2.64

3.65

4.66

Answer: 2. 64

Q393: The purpose of a TLB is

1.To cache page translation information

2.To cache frequently used data

3.To hold register values while a process is waiting to be run

4.To hold the start and length of the page table

Answer: 1. 1.To cache page translation information

Q394: The following HTML element is used to display horizontal line

1.

2.<h>

3.<hr>

4.<h2>

Answer: 3. <hr>

Q395: To prevent any method from overriding, the method has to declared as,

1.static

2.const

3.final

4.extends

Answer: 3. final

Q396: Use of _____ allows for some processes to be waiting on I/O while another process executes.

1.multiprogramming

2.multiuser interfacing

3.Random scheduling

4.Variable cpu cycles

Answer: 1. multiprogramming

Q397: What are the parameters of the service method?

1.ServletRequest and ServletResponse

2.HttpServletRequest and HttpServletResponse

3.HttpRequest and HttpResponse

4.Request and Response

Answer: 1. ServletRequest and ServletResponse

Q398: What does JSP stand for?

1.Java Scripting Pages

2.Java Service Pages

3.Java Server Pages

4.Java Script Program

Answer: 3. Java Server Pages

Q399: What does the following bit of JavaScript print out?

```
var a = [1,,3,4,5];
```

```
console.log([a[4], a[1], a[5]]);
```

1.5, undefined,undefined

2.5,3,undefined

3.5,0,undefined

4.5,null,undefined

Answer: 1. 5, undefined, undefined

Q400: What is cell padding?

1.Used to separate cell walls from their contents

2.Used to set space between cells

3.Used to provide width to a cell

4.Used to merge two cells

Answer: 1. Used to separate cell walls from their contents

Q401: What is the correct HTML for making a text input field?

1.<input type="text">

2.<textfield>

3.<input type="textfield">

4.<textinput type="text">

Answer: 1. <input type="text">

Q402: What will be printed as the output of the following program?

```
public class testincr  
{  
    public static void main(String args[])  
    {  
        int i = 0;  
        i = i++ + i;  
        System.out.println(" I = " +i);  
    }  
}
```

1.I = 0

2.I = 1

3.I = 2

4.I = 3

Answer: 2. I = 1

Q403: Which method is used to get the year of a date object in YYYY format in Javascript.

- 1.getYear()
- 2.getYYYY()
- 3.getFullYear()
- 4.get4Year()

Answer: 1. getYear()

Q404: Which of the following input controls that cannot be placed using <input> tag?

- 1.Text
- 2.Password
- 3.Submit
- 4.Textarea

Answer: 4. textarea

Q405: Which is the correct CSS syntax?

- 1.body:color=black
- 2.{body;color:black}

3. {body: color=black(body)}

4. body {color: black}

Answer: 4. body { color: black}

Q406: Which of the following asymptotic notation is the worst among all?

1. $n + 9378$

2. 2^{n-1}

3. $2^n - 1$

4. $2n + 1$

Answer: nan

Q407: Which of the following is/are example(s) of stateful application layer protocols?

(i) HTTP

(ii) FTP

(iii) TCP

(iv) POP3

1. (i) and (ii) only

2.(ii) and (iii) only

3.(ii) and (iv) only

4.(iv) only

Answer: 3.(ii) and (iv) only

Q408: Which of these is not a valid attribute of <tr> element?

1.valign

2.bgcolor

3.align

4.rowspan

Answer: 3. align

Q409: Which of these methods has no restrictions on content size when a form is submitted.

1.GET

2.HEAD

3. POST

4.PUT

Answer: 3. POST

Q410: Which one is the first search engine in internet?

1.Google

2.Archie

3.AltaVista

4.WAIS

Answer: 3. AltaVista

Q411: While inserting the elements 71,65,84,69,67,83 in an empty binary search tree (BST) in the sequence shown, the element in the lowest level is

1.45

2.67

3.34

4.78

Answer: 2. 67

Q412: A mailer that transforms a message body of an e-mail into a web page is called a

1.Browser enriched mail client

2.HTML-enabled mail client

3.Rich Text mail client

4.client server mail client

Answer: 2. HTML enabled mail client

Q413: An incorrectly typed command will cause the operating system to display

1.a prompt

2.an error message

3.a question mark

4.causes exception

Answer: 2. an error message

Q414: Choose the correct HTML to left-align the content inside a table cell

1. <tdleft>

2. <td leftalign>

3.<td valign="left">

4.<td align="left">

Answer: 4. <td align="left">

Q415: Consider the below code fragment:

```
if(fork k( ) == 0)
{
a= a+5; printf("%d, %d \n", a, &a);
}
else
{
a= a ? 5;
printf("%d %d \n", 0, &a);
```

```
}
```

Let u , v be the values printed by parent process and x , y be the values printed by child process.

Which one of the following is true?

1. $u = x + 10$ and $v = y$

2. $u = x + 10$ and $v \neq y$

3. $u + 10 = x$ and $v = y$

4. $u + 10 = x$ and $v \neq y$

Answer: 3. $u + 10 = x$ and $v = y$

Q416: Consider the following C code segment:

```
int a, b, c = 0;
```

```
void prtFun(void);
```

```
main( )
```

```
{ static int a = 1; /* Line 1 */
```

```
prtFun( );
```

```
a += 1;
```

```
prtFun( )
```

```
printf("\n %d %d", a, b);
```

```
}
```



```

void prtFun(void)
{ static int a=2; /* Line 2 */
  int b=1;
  a+=++b;
  printf("\n %d %d", a, b);
}

```

What output will be generated by the given code segment if:

Line 1 is replaced by `auto int a = 1;`

Line 2 is replaced by `register int a = 2;`

1.31

41

42

2.42

61

61

3.42

62

20

4.42

42

20

Answer: 3

Q417: Consider the following C program.

```
#include <stdio.h>

int f1 (void) ;

int f 2 (void) ;

int x = 10;

int main ()

{

int x=1;

x+=f1()+ f2()+f3()+f2() ;

printf("%d", x);

return 0;

}

int f1(){int x=25; x++; return x;}

int f2(){static int x =50; x++;return x;}

int f3(){x*=10; return x};
```

The output of the program is_____.

1.434

2.230

3.43

4.432

Answer: 2. 230

Q418: Consider the following program:

```
int f(int *p, int n)
```

```

{
if (n <= 1) return 0;
else return max ( f (p+1, n-1),p[0]-p[1]);
}

int main()
{
int a[] = {3,5,2,6,4};
printf("%d", f(a,5));
}

```

The value printed by this program is

1.1

2.2

3.3

4.4

Answer: 3.3

Q419: Find the output of the following program?

```

#include <iostream.h>

using namespace std;

void myFunction(int& x, int* y, int* z) {

static int temp=1;

temp += (temp + temp) - 1;

```

```

x += *(y++ + *z)+ temp - ++temp;

*y=x;

x=temp;

*z= x;

cout<<x<<*y<<*z<<temp;

}

```

```

int main() {

int i = 0;

int j[] = {0, 1, 2, 3, 4, 5, 6, 7, 8, 9};

i=i++ - ++i;

myFunction(i, j, &i);

return 0;

}

```

2. 3 2 3 3

Answer: 2. 3 2 3 3

Q420: If you don't want the frame windows to be resizable, simply add what to the lines ?

1.save

2.dontresize

3.noresize

4.Delete

Answer: 3. noresize

Q421: Sockets originate from

1.BSD Unix

2.Windows

3.Linux

4.Mac

Answer: 1. BSD Unix

Q422: The preorder traversal sequence of a binary search tree is 30, 20, 10, 15, 25, 23, 39, 35,

42.Which one of the following is the postorder traversal sequence of the same tree?

1.10,20,15,23,25,35,42,39,30

2.15,10,25,23,20,42,35,39,30

3.15,20,10,23,25,42,35,39,30

4.15,10,23,25,20,35,42,39,30

Answer: 4.15,10,23,25,20,35,42,39,30

Q423: What will be the output of the following C program?

```
void count(int n){  
    static int d=1;  
    printf("%d ", n);  
    printf("%d ", d);  
    d++;  
    if(n>1) count(n-1);  
    printf("%d ", d);  
}  
void main(){  
    count(3);  
}
```

1.3 1 2 2 1 3 4 4 4

2.3 1 2 1 1 1 2 2 2

3.3 1 2 2 1 3 4

4.3 1 2 1 1 1 2

Answer: 1. 3 1 2 2 1 3 4 4 4

Q424: Where in an HTML document is the correct place to refer to an external style sheet?

1.In the head section

2.In the section

3. At the end of the document

4.At the top of the document

Answer: 1. In the head section

Q425: Which of the following is included in the head section of HTML

1.title,body,form and script

2.title,meta tag,script and CSS

3.title , meta tag,css and form

4.title, body,script and CSS

Answer: 2.title,meta tag,script and CSS

Q426: Which of these is Server side technology?

- 1.CGI
- 2.HTML
- 3.JavaScript
- 4.CSS

Answer: 1. CGI

Q427: Which of the following in HTML is used to left align the content inside a table cell?

- 1.<td raligh = "left" >
- 2.<tdleft>
- 3.<td leftalign>
- 4.<td align = "left">

Answer: 4. <td align = "left">

Q428: Which one of the following statements is NOT correct about HTTP cookies?

- 1.A cookie is a piece of code that has the potential to compromise the security of an internet user

2.A cookie gains entry to the user's work area through an HTTP header

3.A cookie has an expiry date and time

4.Cookies can be used to track the browsing pattern of a user at a particular site

Answer: 1. A cookie is a piece of code that has the potential to...

Q429: Consider the following program:

```
int f(int *p, int n)
{
    if (n <= 1) return 0;
    else return max ( f (p+1, n-1), p[0]-p[1]);
}

int main()
{
    int a[] = {3,5,2,6,4};
    printf("%d", f(a,5));
}
```

The value printed by this program is

1.1

2.2

3.3

4.4

Answer: 2022-03-03 00:00:00

Q430: Which of these methods has no restrictions on content size when a form is submitted.

1.GET

2.HEAD

3.POST

4.PUT

Answer: 3. POST

Q431: _____datastructure used in pushdown automata.

1.Stack

2.array

3.queue

4.linked list

Answer: 1.Stack

Q432: Consider the following:

```
temp=root->left;
while(temp->right!=NULL)
temp=temp->right;
return temp;
```

The above code snippet for a BST with the address of the root node in pointer 'root' returns

1.Inorder successor of the root 2.Maximum element in the right subtree of root

3.Minimum element in the right subtree of root

4.Inorder predecessor of the root

Answer: 1. Inorder Successor of the root

Q433: _____ is used to define a special CSS style for a group of HTML elements

1.Class attribute

2.name attribute

3.group attribute

4.id attribute

Answer: 1. Class attribute

Q434: The _____ attribute defines the action to be performed when the form is submitted

1.method attribute

2.action attribute

3.onSubmit attribute

4.onClick attribute

Answer: 2. Action attribute

Q435: Choose the correct statements

a. Final Machine Implement able software for a product embeds in ROM or PROM as an image.

Bytes at each address must be defined for creating the ROM image

b. Coding in assembly is time consuming, so embedded software is developed in high level language

c. Top down or OO approach is used to modularize embedded software development

d. High level language is used for faster coding, use of data structure, data types for definitions and declarations

1. a,b and c are correct

2.all are correct

3.c and d are correct

4.b, c and d are correct

Answer: 2. all are correct

Q436: Consider a schedule S1 given below;

R1(A); W1(A); R2(B); R2(A); R1(B); W2(A+B); W1(B); where R1 and W1 are read and write operations of transaction T1 and R2 and W2 are read and write operations of transaction T2.

Which of the following is correct regarding schedule S1?

1.S1 is a serializable schedule

2.A deadlock will occur if 2PL is used

3.S1 is a conflict serializable schedule

4.S1 is a view serializable schedule

Answer: nan

Q437: Boolean algebra is also called

1.switching algebra

2.arithmetic algebra

3.linear algebra

4.algebra

Answer: 1. Switching

Q438: Software prototyping helps to

1.generate code

2.provide thorough testing

3.explore possible software solutions

4.collect initial software requirements

Answer: 3.explore possible software solutions

Q439: Activities such as documentation and software configuration management are what kind of process activities?

1.Primary

2.Validation

3.Design

4.supporting

Answer: 4. supporting

Q440: In incremental delivery the _____ services are typically delivered first

1.quickest to complete

2.highest-priority

3.cheapest

4.most fun to code

Answer: 2. highest-priority

Q441: In incremental development system structure tends to _____ as many new increments are added.

1.degrade

2.improve

3.develop its own AI

4.shrink

Answer: 1. degrade

Q442: Software specifications are intended to communicate the system needs

1.of the developers to the clients

2.to marketing

3.of the clients to the developers

4.to the general onlineexam./span>

Answer: 3.of the clients to the developers

Q443: This software process model takes the fundamental activities of specification, development, validation, and evolution and represents them as separate process phases such as requirements

specification, software design, implementation, testing, and so on

1.Incremental development

2.The waterfall model

3.Reuse-oriented software engineering

4.Boehm's spiral model

Answer: 2.waterfall model

Q444: What is a software process model?

1.A simplified representation of a software process

2.A presentation put together in Powerpoint

3.A work flow model of the software's components

4.A prototype of the final software product

Answer: 1. A simplified representation of a software process.

Q445: What is a type of software design that designs system data structures to be used in a

database?

1. architectural design
2. interface Design
3. component Design
- 4.Database design

Answer: 4. Database design

Q446: What is based on the idea of developing an initial implementation, exposing this to user comment and evolving it through several versions until an adequate system has been developed?

- 1.The Waterfall Method
- 2.Incremental Development
- 3.Reuse-oriented Software Engineering
- 4.Implementation And Unit Testing

Answer: 2. Incremental Development

Q447: What is NOT part of the design process

- 1.Architectural design

2.Database design

3.Component design

4.Validation testing

Answer: 4. Validation testing

Q448: Which is not part of the waterfall method?

1.Requirements Definition

2.System and Software Design

3.Implementation and Unit Testing

4.System Validation

Answer: 4. system validation

Q449: Which statement best describes a benefit of Incremental development over the waterfall model

1.It is possible to gather more of the requirements up front

2.Time to market is faster because there is less overhead

3.It is easier to get customer feedback on the development work that's been done

4.It is easier to reuse existing components.

Answer: nan

Q450: _____ adds to the costs of Software Development because it usually means that work that has been completed has to be redone

1.Picture quality

2.Production

3.Software speed

4.Change

Answer: 4 change

Q451: Which of the following serial protocol is used in the automotive industry

1.USB

2.SPI

3.I2C

4.CAN

Answer: 2. SPI

Q452: When two location map to the same location in the cache, it is termed as

1.Conflict miss

2.Compulsory miss

3.Capacity miss

4.Cold miss

Answer: 1. conflict miss

Q453: Which are the add-on features of ARM over RISC?

1.Barrel Shifter

2.Auto inc and dec instructions

3.Load / Store Multiple data and instruction bytes

4.All the above

Answer: 2.Auto inc and dec instructions

Q454: An embedded system must have

- i. hard disk
- ii. processor and memory
- iii. operating system
- iv. processor and IO units

1.i & ii

2.iii

3.i, ii & iv

4.iv

Answer: 3. i,ii and iv

Q455: Choose the correct sequence of steps for developing embedded software

- a. Object file is linked using linker
 - b. Compiler generates object file
 - c. Reallocation of address
 - d. Locator sends the codes to device programmer for burning as ROM image in embedded system
- ROM
- e. Loader loads the codes in RAM

1.a, b, c, d, e

2.b, a

3.b, a, c, d

4.only d

Answer: 3.b,a,c,d

Q456: Given the following structure template, choose the correct syntax for accessing the 5th subject marks of the 3rd student:

struct stud

{

int marks[6];

char sname[20];

char rno[10];

}s[10];

1.stud[2].marks[4]

2.stud[4].marks[2]

3.s[2].marks[4]

4.s[4].marks[2]

Answer: 3.s[2].marks[4]

Q457: By default, any real number in C is treated as _____

1.a float

2.a double

3.a long double

4.depends on the memory model

Answer: 2. a double

Q458: _____ is the 1st step in the testing process

1.Analyze results

2.Plan test

3.Release product

4.Conduct tests

Answer: 2. Plan test

Q459: A set of documents in which a given document can contain text, graphics video and audio clips as well as embedded references to other documents world wide web pages are called as -----

1.Hypermedia message

2.Hypertext document

3.Hypermedia Documents

4.Path rectangular grid of Pixels

Answer: 3 Hypermedia Documents

Q460: A software requirements specification (SRS) document should avoid discussing which one of the following?

1.User interface issues

2.Non-functional requirements

3.Design specification

4.Interfaces with third party softwareKey

Answer: 3. Design Specification

Q461: Consider a B+ tree in which the search Answer is 12 bytes long, block size is 1024 bytes,record pointer is 10 bytes long and block pointer is 8 bytes long. The maximum number of keys that can be accommodated in each non-leaf node of the tree is _____

1.40

2.50

3.60

4.70

Answer: 2. 50

Q462: Extreme Programming process model includes framework activities such as

1.analysis, design,coding,testing

2.planning,analysis,design,coding

3.planning,analysis,coding,testing

4.planning, design, coding, testing

Answer: 4 planning,design,coding,testing

Q463: For automatic objects, constructors and destructors are called each time the objects ____

1.enter and leave scope

2.inherit parent class

3.are constructed

4.are destroyed

Answer: 1 enter and leave scope

Q464: Important capability needed for an agile software developer is

1.Trust

2.Competence

3.Decision-making

4.HardworkKey

Answer: 3

Q465: In which phase is Agile Modeling(AM) carried out

1. Analysis

2. Coding

3. Planning

4. Testing

Answer: nan

Q466: Mnemonic codes and variable names are used in

1. Machine language

2. Assembly language

3. high level language

4. Used nowhere

Answer: 2 Assembly Language

Q467: Waterfall model of software development is also termed as

1. The linear sequential model

2.Fountain model

3.Spiral model

4. Concurrent development model

Answer: 1 Linear sequential Model

Q468: Which of the following is not a Life-critical System?

1.Fire Dispatch Systems

2. Nuclear Reactors

3.Power Utilities

4.Inventory Management

Answer: 4. Inventory Management

Q469: Which of the following statement is correct about destructors?

1.A destructor has void return type.

2.A destructor has integer return type.

3.A destructor has no return type.

4.A destructors return type is always same as that of main()

Answer: 3. A destructor has no return type.

Q470: #include <iostream.h>

using namespace std;

int main()

{

int x=20;

if(!(!x)&&x)

cout<< else

{

x=10;

cout<< return 0;

}

}

1.20

2.10

3.1

4.0

Answer: nothing is printed

Q471: Find the output of the following program?

```
#include <iostream.h>

using namespace std;

typedef int * IntPtr;

int main()

{

IntPtr A, B, C;

int D,E;

A = new int(3);

B = new int(6);

C = new int(9);

D = 10;

E = 20;

*A = *B;

B = &E;

D = (*B)++;

*C= (*A)++ * (*B)--;

E= *C++ - *B--;

cout<<*A<<*B<<*C< return 0;

}
```

1.62010206

2.72010107

3.71020106

4.10720107

Answer: 7325630(not in the options)

Q472: If a , b , c, are three nodes connected in sequence in a singly linked list, find the valid statement that may help to change this list to a circular linked list?

1.a->next=c

2.b->next=c

3.a->next=c

4.c->next=b

Answer: 3 (considering the linked list is c,b,a)

Q473: Round Robin scheduling is the strategy of temporarily suspending a running process

- 1.After the CPU time slice expires
- 2.to allow starving processes to run
- 3.when it requests IO
- 4.when OS wait

Answer: nan

Q474: With a single resource, deadlock occurs _____

- 1.if there are more than two processes competing for that resource
- 2.if there are only two process completing for that resource
- 3.if there is a single process competing for that resource
- 4.it never occur in this case

Answer: 4. never occurs in this case

Q475: _____ OS pays more attention on the meeting of the time limits.

- 1.Distributed

2.Network

3.Real time

4.Desktop

Answer: 3.Real Time

Q476: Consider a software program that is artificially seeded with 100 faults. While testing this program, 159 faults are detected, out of which 75 faults are from those artificially seeded faults. Assuming that both are and seeded faults are of same nature and have same distribution, the estimated number of undetected real fault is

Consider a software program that is artificially seeded with 100 faults. While testing this program, 159 faults are detected, out of which 75 faults are from those artificially seeded faults. Assuming that both are and seeded faults are of same nature and have same distribution, the estimated number of undetected real fault is

Answer: 28

Q477: Given the code

```
String s1 = ? VIT? ;
```

```
String s2 = ? VIT ? ;
```

```
String s3 = new String ( s1);
```

Which of the following would equate to true?

1. `s1 == s2`

2. `s1 = s2`

3. `s3 == s1`

4. `s3=s1`

Answer: 1. `s1==s2`

Q478: Suppose T is a binary tree with 14 nodes. What is the minimum possible depth of T?

1. 0

2. 3

3. 4

4. 5

Answer: 2. 3

Q479: The following HTML _____ element contains meta data which is not displayed inside the document

1. `<form>`

2.<title>

3.<table>

4.<frame>

Answer: 2

Q480: To link your Web page to a style sheet, you must use the _____ tag

1.<STYLESHEET>

2.<STYLE>

3.<link>

4.<web>

Answer: 3.<link>

Q481: Which of these will create a shuffled list?

1.

2.

3.<dl>

4.Nested list

Answer: 4. nested list

Q482: Which one of the following is a cryptographic protocol used to secure HTTP connection?

1.Stream Control Transmission Protocol (SCTP).

2.Transport Layer Security (TSL).

3.Explicit Congestion Notification (ECN).

4.Resource Reservation Protocol.

Answer: 2. Transport Layer Security

Q483: Which of the following is example of in-place algorithm?

1.Bubble Sort

2.Merge Sort

3.Insertion Sort

4.

Answer: Bubble sort and insertion sort

Q484: Which of these is asymptotically bigger?

1. $79n^2 + 43n$

$$2.65n^3 + 34n$$

$$3.6 \cdot 2n$$

$$4.5 \cdot 2n$$

Answer: $2.65n^3 + 34n$

Q485: ____ bit in ICW1 indicates whether the 8259A is cascade mode or not

1.LTIM=0 2.LTIM=1 3.SNGL=1 4.SNGL=0

Answer: 4. SNGL=0

Q486: ____ messages are typically used for diagnostic or control purposes or generated in response to errors in IP operations.

1.ICMP 2.TCP 3.UDP 4.IP

Answer: 1.ICMP

Q487: _____ gives the number of bits that can be transmitted over a network in a fixed time period.

1.Latency 2.Jitter 3.Bandwidth 4.Delay

Answer: 3. Bandwidth

Q488: _____ cryptography refers to encryption methods in which both the sender and receiver share the same key.

1.Symmetric 2.Asymmetric 3.Ceaser key 4.Asymmetric key

Answer: 1. Symmetric

Q489: _____ is responsible for the final encapsulation of higher-level messages into frames that are sent over the network using the physical layer.

1.Data link layer 2.Network layer 3.Application layer 4.Session layer

Answer: 1

Q490: _____ appends to the address a slash character and the decimal number of leading bits of the routing prefix.

1.CIDR 2.TCP 3.UDP 4.IP

Answer: 1.CIDR

Q491: _____ is assigned to an organization by a global authority.

1.Subnet ID 2.Supernet ID 3.Host ID 4.Network ID

Answer: 4

Q492: _____ produces the relation that has attributes of R1 and R2

1.Cartesian product

2.Difference

3.Intersection

4.Product

Answer: 1. Cartesian product

Q493: _____ should keep track of multiple file downloads requested by a particular FTP application, or multiple telnet connections from a single terminal client, or web page retrievals from a web server.

1.Transport layer 2.Application layer 3.Presentation layer 4.Session layer

Answer: 1

Q494: _____ functions as a request-response protocol in the client-server computing model.

1.HTTP 2.IP 3.TCP 4.UDP

Answer: 1.HTTP

Q495: _____ is commonly used in wireless LAN.

1.time division multiplexing

2.orthogonal frequency division multiplexing

3.space division multiplexing

4.long division multiplexing

Answer: 2.orthogonal frequency division multiplexing

Q496: _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.

1.Long term

2.Short term

3.Medium term

4.None of these

Answer: 1. Long term

Q497: _____ does the job of allocating a process to the processor.

1.Long term scheduler

2.Short term scheduler (CPU Scheduler)

3.Medium term scheduler

4.Dispatcher

Answer: 1.Long Term Scheduler

Q498: _____ has a dedicated communication path between stations

1.Circuit switching 2.Frame relay 3.Packet switching 4.ATM

Answer: 1. Circuit Switching

Q499: _____ is a high speed cache used to hold recently referenced page table entries as a part of paged virtual memory

1.Translation Look-aside buffer

2.Inverse page table

3.Segmented page table

4.Hierarchical page table

Answer: 1.Translation Look-aside buffer

Q500: _____ memory management scheme will produce least fragement

1.Best Fit

2.Worst Fit

3.First Fit

4.None of these

Answer: 1

Q501: _____ register keeps tracks of the instructions stored in program stored in memory.

1.AR (Address Register)

2. XR (Index Register)

3.PC (Program Counter)

4. AC (Accumulator)

Answer: 3.PC

Q502: _____ states that it is Optimal Replacement algorithm

1.Replace the page that will not be used for a longest period of time

2.Replace the page that will not be used for a shortest period of time

3.Replace the page that will be used for a longest period of time

4.Replace the page that will be used for a shortest period of time

Answer: 1

Q503: _____ algorithm is used for the flow control of data between sender and receiver.

1.Dijkstra 2.RIP 3.Leaky bucket 4.Go Back N

Answer: 4

Q504: _____ programs automatically connects to web sites and download documents and save them to local drive

1.Web Servers

2.Web Downloading Utilities

3.Stay Connected

4.Offline Browsers

Answer: 2.Web Downloading Utilities

Q505: _____ signal prevent the microprocessor from reading the same data more than one

1.pipelining 2.handshaking 3.controlling 4.signaling

Answer: 2

Q506: _____ function in PHP returns a list of response headers sent (or ready to send)

1.header() 2.headers_list() 3.header_sent() 4.header_send()

Answer: 2

Q507: _____ is an initial version of a software system that is used to demonstrate concepts, try out design options, and find out more about the problem and its possible solutions.

1.Prototype

2.Architectural Design

3.Subsystem

4.Module

Answer: 1

Q508: _____ is a basic unit of CPU utilization

1.Process

2.Thread

3.Process Control Block

4.Program Counter

Answer: 2

Q509: _____ is a logical unit of access to a DBMS

- 1.Transaction
- 2.Optimization
- 3.Schema
- 4.Data

Answer: 1

Q510: A graphical HTML browser resident at a network client machine Q accesses a static HTML webpage from a HTTP server S. The static HTML page has exactly one static embedded image which is also at S. Assuming no caching, which one of the following is correct about the HTML webpage loading (including the embedded image)?

- 1.Q needs to send at least 2 HTTP requests to S, each necessarily in a separate TCP connection to server S
- 2.Q needs to send at least 2 HTTP requests to S, but a single TCP connection to server S is sufficient
- 3.A single HTTP request from Q to S is sufficient, and a single TCP connection between Q and S is necessary for this
- 4.A single HTTP request from Q to S is sufficient, and this is possible without any TCP connection between Q and S

Answer: 2

Q511: A 20-bit address bus can locate _____.

1.1,048,576 locations

2.2,097,152 locations

3.4,194,304 locations

4.8,388,608 locations

Answer: 1

Q512: A 32-bit address bus allows access to a memory of capacity

1.1 GB 2.16 MB 3.64 MB 4.4 GB

Answer: 4

Q513: A B-tree of order m has maximum of _____ children

1. m

2. $m + 1$

3. $m - 1$

4. $m/2$

Answer: 1

Q514: A binary code that progresses such that only one bit changes between two successive codes is:

1.Gray code 2.excess-3 code 3.8421 code 4.nine's-complement code

Answer: 1

Q515: A certain 5-bit self-complementary code is used to represent the 10 decimal digits 0 through 9.

Given that (246) in decimal is represented as 00010 00100 00110 in this code, what is the representation for (375)?

1.00110 00100 00010 2.00011 00111 00101 3.11001 11101 11011 4.11101 11011 11001

Answer: 2

Q516: A client process P needs to make a TCP connection to a server process S. Consider the following situation: the server process S executes a `socket()`, a `bind()` and a `listen()` system call in that order, following which it is preempted. Subsequently, the client process P executes a `socket()` system call followed by `connect()` system call to connect to the server process S. The server process has not executed any `accept()` system call. Which one of the following events could take place?

1.connect () system call returns successfully

2.connect () system call blocks

3.connect () system call returns an error

4.connect () system call results in a core dump

Answer: 3

Q517: A COCOMO model is

1.Common Cost Estimation Model.

2.Constructive Cost Estimation Model.

3.Complete Cost Estimation Model.

4.Comprehensive Cost Estimation Model.

Answer: 2

Q518: A collection of unused memory reserved for dynamic allocation is called

1.Heap 2.Static 3.array 4.stack dynamic

Answer: 1

Q519: A comparison between ring and Johnson counters indicates that:

1.A ring counter has fewer flip-flops but requires more decoding circuitry 2.A ring counter has an inverted feedback path 3.A Johnson counter has more flip-flops but less decoding circuitry 4.A Johnson counter has an inverted feedback path

Answer: 4

Q520: A computer on a 10Mbps network is regulated by a token bucket. The token bucket is filled at a rate of 2Mbps. It is initially filled to capacity with 16Megabits. What is the maximum duration for which the computer can transmit at the full 10Mbps?

1.1.6 seconds

2.2 seconds

3.5 seconds

4.8 seconds

Answer: 2

Q521: A data structure where elements can be added or removed at either end but not in the middle

1.linked lists 2.Stacks 3.Queues 4.Deque

Answer: 4

Q522: A fault simulation testing technique is

1.Mutation testing

2.Stress testing

3.Black box testing

4.White box testing

Answer: 1

Q523: A grammar that produces more than one parse tree for some sentence is called

1.Ambiguous 2.Irregular 3.Regular 4.Unambiguous

Answer: 1

Q524: A group of bits that tell the computer to perform a specific operation is known as_____.

1.Instruction code

2. Micro-operation

3.Accumulator

4. Register

Answer: 1

Q525: A J-K flip-flop is in a "no change" condition when _____.

1.J = 1, K = 1 2.J = 1, K = 0 3.J = 0, K = 1 4.J = 0, K = 0

Answer: 4

Q526: A language is represented by a regular expression $(a)^*(a+ba)$. Which of the following string does not belong to the regular set represented by the above expression.

1.aaa

2.aba

3.ababa

4.aa

Answer: 3

Q527: A layer-4 firewall cannot

1.block HTTP traffic during 9:00PM and 5:00AM

2.block all ICMP traffic

3.stop incoming traffic from a specific IP address but allow outgoing traffic to same IP

4.block TCP traffic from a specific user on a specific IP address on multi-user system during 9:00PM and 5:00AM

Answer: 4

Q528: A linear collection of data elements where the linear node is given by means of pointer is called

1.primitive list 2.node list 3.linked list 4.array

Answer: 3.linked list

Q529: A major problem with priority scheduling is _____.

1. Definite blocking

2. Starvation

3. Low priority

4. None of these

Answer: 2

Q530: A minimum state DFA accepting the language $L = \{w/w \text{ belongs } \{0,1\}^* \mid \text{number of 0s and 1s in } w \text{ are divisible by 3 and 5, respectively}\}$ has

1. 15 states

2. 7 states

3. 9 states

4. 8 states

Answer: 1. 15

Q531: A network that contains multiple hubs is most likely configured in which topology?

1.Mesh 2.Tree 3.Bus 4.Star

Answer: 2. Tree

Q532: A NFA converted to DFA has more than one final state.

1.True

2.False

3.may be true

4.always true

Answer: nan

Q533: A one to many relationship (of table A to Table B) is

1.Where each record in table A can have one or more matching records in table B

2.Where each record in table B can have one or more matching records in table A

3.Where each record in Table B is required to have a match in table A

4. Where each record in table A is required to have a match in table B

Answer: 1. Where each record in table A can have one or more matching records in table B

Q534: A packet switching network

1. can reduce the cost of using an information utility 2. allows communications channel to be shared among more than one user 3. can reduce the cost of using an information utility and allows communications channel to be shared among more than one user 4. is free

Answer: 2. allows communications channel to be shared among more than one user

Q535: A page fault occurs

1. when the page is not in the main memory

2. when the page is in the cache memory

3. when the process enters the blocked state

4. when the process is in the ready state

Answer: 1

Q536: A parameterized constructor with all arguments initialized is same as

1.default constructor 2.parameterized constructor 3.overriding 4.overloading

Answer: 2.parameterized constructor

Q537: A periodic signal completes one cycle in 0.01 s. What is the frequency?

1.1 Hz

2.100 Hz

3.1 KHz

4.1 MHz

Answer: 2. 100 Hz

Q538: A point-to-point protocol over ethernet is a network protocol for

1.encapsulating PPP frames inside ethernet frames

2.encapsulating ethernet frames inside PPP frames

3.for security of ethernet frames

4.for security of PPP frames

Answer: 1.encapsulating PPP frames inside ethernet frames

Q539: A primary key, if combined with a foreign key creates

1.Many to many relationships between the tables that connect them 2.Network model between the tables connect them 3.one to many relationship between the tables that connect them 4.Parent child relationship between the tables that connect them

Answer: 4.Parent child relationship between the tables that connect them

Q540: A professional software engineer must:

1.be loyal to the organization

2.build trust from customers

3.socialize with customers

4.be loyal to the organization and build trust from customers

Answer: nan

Q541: A relation R is said to be in 2NF when it does not have

1. Partial Dependencies

2. Transitive Dependencies

3. Multivalued Attributes

4. Both Partial dependencies and Multivalued Dependencies

Answer: 1. Partial Dependencies

Q542: A relational database is

1. the same as a flat file database

2. one that consists of two or more tables that are joined in some way

3. one that consists of two or more tables

4. a database that is able to process tables, queries, forms, reports and macros

Answer: 4. a database that is able to process tables, queries, forms, reports and macros

Q543: A ring counter is same as.

1.up-down counter 2.parallel adder 3.shift register 4.ALU

Answer: 3. shift register

Q544: A set of possible data values is called

1.attribute

2.degree

3.domain

4.tuple

Answer: 3.domain

Q545: A shift register can be used for.

1.Digital delay line 2.Serial to parallel conversion 3.All of these 4.Parallel to serial conversion

Answer: 3. All of these

Q546: A single channel is shared by multiple signals by

1.analog modulation

2.digital modulation

3.multiplexing

4.none of the mentioned

Answer: 3. multiplexing

Q547: A software package designed to store and manage databases

1.Database

2.DBMS

3.Data Model

4.Data

Answer: 2. DBMS

Q548: A stack organized computer has

1.Three-address Instruction

2. Two-address Instruction

3. One-address Instruction

4. Zero-address Instruction

Answer: 4. Zero-address Instruction

Q549: A stakeholder is anyone who will purchase the completed software system under development.

1. TRUE

2. False

3. 4.

Answer: 2. FALSE

Q550: A static data member is given a value

1. Within the class definition 2. Outside the class definition 3. When the program is executed 4. Never

Answer: 2. Outside the class definition

Q551: A synchronous sequential circuit is made up of.

1.combinational gates 2.flip-flops 3.both flip-flops and latches 4.both combinational gates and flip-flops

Answer: both combinational gates and flip-flops

Q552: A system uses FIFO policy for page replacement. It has 4 page frames with no pages loaded to begin with. The system first accesses 100 distinct pages in some order and accesses the same 100 pages but now in the reverse order how many page faults will occur?

1.196

2.192

3.197

4.195

Answer: 1. 196

Q553: A table can have only one

1.Secondary key

2.Alternate key

3.Unique key

4.Primary key

Answer: 4. Primary key

Q554: A tree structured file directory system

1.allows easy storage and retrieval of file names

2.is not essential when we have millions of files

3.is a much debated unnecessary feature

4.none of these

Answer: 1.allows easy storage and retrieval of file names

Q555: A value that has no defined value is expressed in PHP with the following keyword:

1.undef 2.null 3.Cant Define 4.There is no such concept in PHP

Answer: 2. null

Q556: A variable P is called pointer if

1.P contains the address of an element in DATA 2.P contain the DATA and the address of DATA

3.P can store only memory addresses 4.P points to the address of first element in DATA

Answer: 1.P contains the address of an element in DATA

Q557: A variable P is called pointer if

- 1.P contains the address of an element in DATA
- 2.P contain the DATA and the address of DATA
- 3.P can store only memory addresses
- 4.P points to the address of first element in DATA

Answer: 1.P contains the address of an element in DATA

Q558: A view is a

- 1.virtual table
- 2.subset of the table
- 3.base table
- 4.super table

Answer: 1. virtual table

Q559: A Winchester disk is a

- 1.Disk stack

2.Removable disk

3.Flexible disk

4.None of these

Answer: 1. Disk stack

Q560: A complete binary min-heap is made by including each integer in $[1;1023]$ exactly once. The depth of a node in the heap is the length of the path from the root of the heap to that node. Thus, the root is at depth 0. The maximum depth at which integer 9 can appear is

1.7

2.8

3.9

4.10

Answer: 2022-02-08 00:00:00

Q561: Abstraction is

1.Having onlineexam.members 2.having private member and onlineexam.function 3.friend function

4.friend classes

Answer: nan

Q562: Acceptance tests are normally conducted by the

1. developer
2. end users
3. test team
4. systems engineers

Answer: 2. end users

Q563: Access time is faster for _____.

1. ROM
2. SRAM
3. DRAM
4. ERAM

Answer: 2. SRAM

Q564: Additive rule

1.cyan+ magenta+ Yellow= white 2.Red + Green + Blue = white 3.cyan+ Green+ Yellow= white
4.cyan+ magenta+ Yellow= Black

Answer: 2. Red + Green + Blue= White

Q565: Address line for TRAP is?

1.0023H

2.0024H

3.0033H

4.0099H

Answer: 2. 0024 H

Q566: ALE stands for _____

1.address latch enable

2.address level enable

3.address leak enable

4.address leak extension

Answer: 1.address latch enable

Q567: ALGORITHM HAS THE _____ TO THE PROBLEM IN _____
NUMBER OF STEPS

1.SOLUTION & FINITE 2.PROBLEM & INFINITE 3.SOLUTION & INFINITE 4.PROBLEM & FINITE

Answer: 1.SOLUTION & FINITE

Q568: All devices/host connect to a central switch in _____ topology.

1.Star 2.Ring 3.Bus 4.Tree

Answer: 1. Star

Q569: All the modules of the system are integrated and tested as complete system in the case of

1.Bottom up testing

2.Top-down testing

3.Sandwich testing

4.Big-Bang testing

Answer: 4. Big Bang testing

Q570: Among simple LR (SLR), canonical LR, and look-ahead LR (LALR), which of the following pairs identify the method that is very easy to implement and the method that is the most powerful, in that order?

1.SLR , LALR

2.CLR , LALR

3.SLR , CLR

4.SLR

Answer: 3. SLR, CLR

Q571: An activity is said to be critical if slack time is equal to

1.0

2.1

3.2

4.3

Answer: 1. 0

Q572: An advantage of the database approach is

1.Elimination of the data redundancy 2.Ability to associate related data 3.Increase security 4.All of the options

Answer: 4. ALL of the options

Q573: An Entity from an ER diagram can be represented in the relational model by a

1.relation

2.domain

3.functional dependency

4.single attribute

Answer: 1

Q574: An ethernet frame that is less than the IEEE 802.3 minimum length of 64 octets is called

1.short frame

2.runt frame

3.mini frame

4.man frame

Answer: 2. Runt frame

Q575: An example for hybrid routing protocol

1.DSR

2.AODV

3.ZRP

4.OLSV

Answer: 3. ZRP

Q576: An intermediate code form is

1.Postfix notation 2.Syntax trees 3.Three address code 4.Postfix notation, Syntax trees and Three address code

Answer: 4.Postfix notation, Syntax trees and Three address code

Q577: An organization has a class B network and wishes to form subnets for 64 departments. The subnet mask would be:

1.255.255.0.0

2.255.255.64.0

3.255.255.128.0

4.255.255.252.0

Answer: 4. 255.255.252.0

Q578: Any code inside a loop that always computes the same value can be moved before the loop.
This is called

1. Loop invariant computation 2. Interchange of statements 3. induction variable 4. Algebraic Transformation

Answer: 1. Loop invariant computation

Q579: Application layer protocol defines

1. types of messages exchanged

2.message format, syntax and semantics

3.rules for when and how processes send and respond to messages

4.all of the mentioned

Answer: 4.all of the mentioned

Q580: Architecture of the database can be viewed as

1.two levels

2.four levels

3.three levels

4.one level

Answer: 3.three levels

Q581: Arrange the operators according to their precedence: +, %, ->, =

1.->, %, +, =

2.=, +, %, ->

3.%, +, =, ->

4.%, ->, =, +

Answer: 2.=, +, %, ->

Q582: Assume that a table R with 1000 records is to be joined with another table S with 10000 records. What is the maximum number of records that would result in if we join R with S and the equi-join attribute of S is the primary key?

1.1000

2.10000

3.1,00,00,000

4.11000

Answer: 4

Q583: Assume that we have constructor functions for both base class and derived class. Now consider the declaration in main(). Base * P = New Derived; in what sequence will the constructor be called ?

1.Derived class constructor followed by Base class constructor. 2.Base class constructor followed by derived class constructor. 3.Base class constructor will not be called. 4.Derived class constructor will not be called.

Answer: 2.Base class constructor followed by derived class constructor.

Q584: Assume the base address of CS is 3000H and IP is 2000H. Calculate the memory address.

1.32000H 2.3000H 3.30000H 4.2000H

Answer: 1. 32000H

Q585: Assume you would like to sort an array in ascending order by value while preserving key associations. Which of the following PHP sorting functions would you use?

1.ksort()

2.asort()

3.krsort()

4.sort()

Answer: 2.asort()

Q586: Assuming today is Monday, 10 July 2000, what is returned by this statement: SELECT to_char>Last_DAY(sysdate), 'DD-MON-RR') FROM dual;

1.17-JUL-00

2.10-JUL-00

3.31-DEC-00

4.31-JUL-00

Answer: 1.17-JUL-00

Q587: Binary search algorithm can not be applied to

1.sorted linked list 2.sorted binary trees 3.sorted linear array 4.pointer array

Answer: 1.sorted linked list

Q588: Bit stuffing refers to

1.inserting a '0' in user data stream to differentiate it with a flag 2.inserting a '0' in flag data stream to avoid ambiguity 3.appending a nibble to the flag sequence 4.appending a nibble to the user data stream

Answer: 1.inserting a '0' in user data stream to differentiate it with a flag

Q589: Bits can be send over guided and unguided media as analog signal using

1.digital modulation

2.amplitude modulation

3.frequency modulation

4.phase modulation

Answer: 1.digital modulation

Q590: Boundary value analysis can only be used to do white-box testing.

1.true

2.false

3. 4.

Answer: 2. False

Q591: BTMA protocol comes under which mechanism?

1.Contention Based Protocols

2.Contention based protocols with reservation mechanisms

3.MAC protocols

4.Contention based protocols with scheduling

Answer: 1.Contention Based Protocols

Q592: By following modern system engineering practices simulation of reactive systems is no longer necessary.

1.True

2.FALSE

3. 4.

Answer: 2.False

Q593: C variable cannot start with

1.a number

2.underscore

3.None

4.an alphabet

Answer: 1.a number

Q594: Cache memory acts between_____.

1.CPU and RAM

2. RAM and ROM

3.CPU and Hard Disk

4. None of these

Answer: 1.CPU and RAM

Q595: Calculate the block number in free storage management of files system with number of bits per word is 8, the bit vector is

0001101010101, offset of first 1 bit is 3

1.59

2.51

3.45

4.53

Answer: 1.59

Q596: Calculate the EAT(Effective access time) if 5 micro second is associative look-up time and 0.80 is the hit-ratio in paging hardware with TLB

1.6.2 micro second

2.7.8 micro second

3.2.2 micro second

4.3.2 micro second

Answer: 3.2.2 micro second

Q597: Cartesian product in relational algebra is

1.a Unary operator

2.a Binary operator

3.a Ternary operator

4.not defined

Answer: 2.a Binary operator

Q598: Change cannot be easily accommodated in most software systems, unless the system was designed with change in mind.

1.True

2.False

3. 4.

Answer: 1.True

Q599: Changes made to an information system to add the desired but not necessarily the required features is called

1.Preventative maintenance.

2.Adaptive maintenance.

3.Corrective maintenance.

4.Perfective maintenance.

Answer: 4.Perfective maintenance.

Q600: Class ____ IP addresses are used for large organizations

1.A 2.B 3.D 4.C

Answer: 1.A

Q601: class n{ int a;}; how much memory the compiler allocates for this class

1.0 2.2 3.depends on compiler 4.4

Answer: 4.4

Q602: Class testing of object-oriented software is equivalent to unit testing for traditional software.

- 1.true
- 2.false
- 3. 4.

Answer: 1.true

Q603: Classes and components that exhibit functional, layer, or communicational cohesion are relatively easy to implement, test, and maintain.

- 1.true
- 2.false
- 3. 4.

Answer: 1.true

Q604: Compile time polymorphism is

- 1.function overloading 2.template 3.function overriding 4.abstraction

Answer: 1.function overloading

Q605: Computers use addressing mode techniques for _____.

- 1.giving programming versatility to the user by providing facilities as pointers to memory counters for loop control
- 2.to reduce no. of bits in the field of instruction
- 3.specifying rules for modifying or interpreting address field of the instruction
- 4.All of these

Answer: 4.All of these

Q606: Condition testing is a control structure testing technique where the criteria used to design test cases is that they

1. rely on basis path testing
- 2.exercise the logical conditions in a program module
- 3.select test paths based on the locations and uses of variables
- 4.focus on testing the validity of loop constructs

Answer: 2.exercise the logical conditions in a program module

Q607: Consider 2 scenarios:

C1: For DFA (ph, SH, d, qo, F),

if $F = \text{ph}$, then $L = \text{SH}^*$

C2: For NFA (ph, SH, d, qo, F),

if $F = \text{ph}$, then $L = \text{SH}^*$

Where F = Final states set

ph = Total states set

Choose the correct option ?

1.Both are true

2.Both are False

3.C1 is true, C2 is false

4.C1 is false, C2 is true

Answer: 3.C1 is true, C2 is false

Q608: Consider a binary tree T that has 200 leaf nodes. Then, the number of nodes in T that have exactly two children are _____.

1.199 2.200 3.Any number between 0 and 199 4.Any number between 100 and 200

Answer: 1.199

Q609: Consider a DFA over $\Sigma = \{a, b\}$ accepting all strings which have number of a's divisible by 6 and number of b's divisible by 8. What is the minimum number of states that the DFA will have?

- 1.8
- 2.14
- 3.15
- 4.48

Answer: 4.48

Q610: Consider a hash table with 9 slots. The hash function is $h(k) = k \bmod 9$. The collisions are resolved by chaining. The following 9 keys are inserted in the order: 5, 28, 19, 15, 20, 33, 12, 17, 10. The maximum, minimum, and average chain lengths in the hash table, respectively, are

- 1.3, 3, and 3
- 2.3, 0, and 1
- 3.4, 0, and 1
- 4.3, 0, and 2

Answer: 2.3, 0, and 1

Q611: Consider an instance of TCP's Additive Increase Multiplicative Decrease(AIMD) algorithm where the window size at the start of the slow start phase is 2 MSS and the threshold at the start of the first transmission is 8 MSS. Assume that a time out occurs during the fifth transmission. Find the congestion window size at the end of the tenth transmission.

- 1.8 MSS

2.14 MSS

3.7 MSS

4.12 MSS

Answer: 3.7 MSS

Q612: Consider an undirected graph G with 100 nodes. The maximum number of edges to be included is

1.2451 2.4950 3.9900 4.4851

Answer: 2.495

Q613: Consider $S \rightarrow SS|a$ what is the number of different derivation trees for aaaaaa

1.5

2.3

3.14

4.7

Answer: 4.7

Q614: Consider the CFG with {S,A,B} as the non-terminal alphabet, {a,b} as the terminal alphabet, S as the start symbol and the following set of production rules

$S \rightarrow aB$ $S \rightarrow bA$

$B \rightarrow b$ $A \rightarrow a$

$B \rightarrow bS$ $A \rightarrow aS$

$B \rightarrow aBB$ $A \rightarrow bAA$

Which of the following strings is generated by the grammar?

1.aaaabb

2.aabbbb

3.aabbab

4.abbbba

Answer: 3.aabbab

Q615: Consider the data of previous question. Suppose that the sliding window protocol is used with the sender window size of 2^i where i is the number of bits identified in the previous question and acknowledgments are always piggybacked. After sending 2^i frames, what is the minimum time the sender will have to wait before starting transmission of the next frame? (Identify the closest choice ignoring the frame processing time).

1.16ms

2.18ms

3.20ms

4.22ms

Answer: 3. 20 ms

Q616: Consider the DFAs M and N given above. The number of states in a minimal DFA that accepts the language $L(M) \cap L(N)$ is _____.

1.0

2.1

3.2

4.3

Answer: 2.1

Q617: Consider the following array of elements. {89,19,50,17,12,15,2,5,7,11,6,9,100}. The minimum number of interchanges needed to convert it into a max-heap is

1.4 2.2 3.5 4.3

Answer: 4.3

Q618: Consider the following C code segment.

```
for (i = 0, i < n; i++)
```

```
{  
    for (j=0; j<n; j++)  
    {  
        if (i%2)  
        {  
            x += (4*j + 5*i);  
            y += (7 + 4*j);  
        }  
    }  
}
```

Which one of the following is false?

- 1.The code contains loop invariant computation
- 2.There is scope of common sub-expression elimination in this code
- 3.There is scope of strength reduction in this code
- 4.There is scope of dead code elimination in this code

Answer: 4.There is scope of dead code elimination in this code

Q619: Consider the following C declaration

```
struct {
```

short s [5]

union {

float y;

long z;

}u;

} t;

Assume that objects of the type short, float and long occupy 2 bytes, 4 bytes and 8 bytes, respectively. The memory requirement for variable t, ignoring alignment considerations, is

1.10 bytes 2.18 bytes 3.22 bytes 4.14 bytes

Answer: 2.18 bytes

Q620: Consider the following C function

```
void swap ( int x, int y )
```

```
{
```

```
int tmp;
```

```
tmp = x;
```

```
x= y;
```

```
y = tmp;
```

```
}
```

In order to exchange the values of two variables a and b:

1.swap(a, b) cannot be used as it does not return any value

2.swap(a, b) cannot be used as the parameters passed by value

3.Call swap (&a, &b)

4.Call swap (a, b)

Answer: 2.swap(a, b) cannot be used as the parameters passed by value

Q621: Consider the following C program

```
#include<stdio.h>

main()
{
float sum = 0.0, j =1.0, i = 2.0;
while(i/j > 0.001) {
j = j + 1;
sum = sum + i/j;
printf ( "%fn", sum );
}
}
```

How many lines of output does this program produce?

1.20-29 lines of output

2.0-9 lines of output

3.10-19 lines of output

4. More than 29 lines of output

Answer: 4. More than 29 lines of output

Q622: Consider the following code segment.

```
x = u - t;
```

```
y = x * v;
```

```
x = y + w;
```

```
y = t - z;
```

```
y = x * y;
```

The minimum number of total variables required to convert the above code segment to static single assignment form is

1.6

2.8

3.9

4.10

Answer: 2022-04-10 00:00:00

Q623: Consider the following code snippet

```
var a1 = [,,];
```

```
var a2 = new Array(3);
```

0 in a1

0 in a2

Result of Javascript is:

1.true false

2.false true

3.true true

4.false true

Answer: 1. true false

Q624: Consider the following code snippet: `var a = [1,2,3,4,5]; a.slice(0,3);` What is the possible output for the above code snippet?

1.Returns [1,2,3] 2.Returns [4,5] 3.Returns [1,2,3,4] 4.Returns [1,2,3,4,5]

Answer: 1.Returns [1,2,3]

Q625: Consider the following code snippet

```
function oddsums(n)
```

```
{
```

```
    let total = 0, result=[];
```

```
    for(let x = 1; x <= n; x++)
```

```
    {
```

```
        let odd = 2*x-1;
```

```
    total += odd;

    result.push(total);
}

return result;
}
```

What would be the output if

oddsums(5);

1.Returns [1,4,9,16,25]

2. Returns [1,2,3,4,5]

3.Returns [3,6,9,12,15]

4.Returns [1,3,5,7,9]

Answer: 1.Returns [1,4,9,16,25]

Q626: Consider the following code: `var a = []; a.unshift(1); a.unshift(22); a.shift(); a.unshift(3,[4,5]); a.shift(); a.shift(); a.shift();` The final output for the `shift()` is

1.1 2.[4,5] 3.[3,4,5] 4.Exception

Answer: 1.1

Q627: Consider the following function

```
double f(double x)
```

```
{
```

```
if (abs(x*x - 3) < 0.01) return x;
```

```
else return f(x/2 + 1.5/x);
```

```
}
```

Give a value q (to 2 decimals) such that $f(q)$ will return q :_____.

1.1.723 2.1.732 3.0.732 4.1.733

Answer: 2. 1.732

Q628: Consider the following javascript code snippet :

```
var a = [];
```

```
a.unshift(1);
```

```
a.unshift(22);
```

```
a.shift();
```

```
a.unshift(3,[4,5]);
```

```
a.shift();
```

```
a.shift();
```

```
a.shift();
```

The final output for the shift() is

1.1

2.[4,5]

3.[3,4,5]

4.Exception

Answer: 1.1

Q629: Consider the following program fragment

```
if(a > b)
```

```
if(b > c)
```

```
s1;
```

```
else s2;
```

s2 will be executed if

1.b >= c and a <= b

2.a > b and b <= c

3.a<=b

4.b>c

Answer: 2.a > b and b <= c

Q630: Consider the following program in C language:

```
#include  
  
main()  
{  
    int i;  
    int *pi = &i;  
    scanf("%d",pi);  
    printf("%d\n", i+5);  
}
```

Which one of the following statements is TRUE?

- 1.Compilation fails.
- 2.Execution results in a run-time error.
- 3.On execution, the value printed is 5 more than the address of variable i
- 4.On execution, the value printed is 5 more than the integer value entered

Answer: 4.On execution, the value printed is 5 more than the integer value entered

Q631: Consider the following statements for priority queue :

S1 : It is a data structure in which the intrinsic ordering of the elements does determine the result of its basic operations.

S2 : The elements of a priority queue may be complex structures that are ordered on one or several fields.

Which of the following is correct?

1. Both S1 and S2 are incorrect
2. S1 is correct and S2 is incorrect
3. Both S1 and S2 are correct
4. S1 is incorrect and S2 is correct

Answer: 3. Both S1 and S2 are correct

Q632: Consider the following two sets of LR(1) items of an LR(1) grammar.

$X \rightarrow c.X, c/d$

$X \rightarrow .cX, c/d$

$X \rightarrow .d, c/d$

$X \rightarrow c.X, \$$

$X \rightarrow .cX, \$$

$X \rightarrow .d, \$$

Which of the following statements related to merging of the two sets in the corresponding LALR parser is/are FALSE?

1. Cannot be merged since look aheads are different.
2. Can be merged but will result in S-R conflict.
3. Can be merged but will result in R-R conflict.
4. Cannot be merged since goto on c will lead to two different sets.

1.1 only

2.2 only

3.1 and 4 only

4.1,2,3,4

Answer: 4.1,2,3,4

Q633: Consider the following two sets of LR(1) items of an LR(1) grammar.

$X \rightarrow c.X, c/d$

$X \rightarrow .cX, c/d$

$X \rightarrow .d, c/d$

$X \rightarrow c.X, \$$

$X \rightarrow .cX, \$$

$X \rightarrow .d, \$$

Which of the following statements related to merging of the two sets in the corresponding LALR parser is/are FALSE?

1. Cannot be merged since look aheads are different.
2. Can be merged but will result in S-R conflict.
3. Can be merged but will result in R-R conflict.
4. Cannot be merged since goto on c will lead to two different sets.

1.1 only

2.2 only

3.3 and 4 only

4.1,2,3,4

Answer: 4.1,2,3,4

Q634: Consider the grammar shown below.

$S \rightarrow C C$

$C \rightarrow c C \mid d$

The grammar is

1.LL(1)

2.SLR(1) but not LL(1)

3.LALR(1) but not SLR(1)

4.LR(1) but not LALR(1)

Answer: 1.LL(1)

Q635: Consider the grammar with the following translation rules and E as the start symbol.

$E \rightarrow E1 \# T \{ E.value = E1.value * T.value \}$

$\mid T \{ E.value = T.value \}$

$T \rightarrow T1 \& F \{ T.value = T1.value + F.value \}$

$\mid F \{ T.value = F.value \}$

$F \rightarrow num \{ F.value = num.value \}$

Compute E.value for the root of the parse tree for the expression: $2 \# 3 \& 5 \# 6 \& 4$.

1.200

2.180

3.160

4.40

Answer: 3. 160

Q636: Consider the grammar $S \rightarrow (S) \mid a$

Let the number of states in SLR(1), LR(1) and LALR(1) parsers for the grammar be n_1 , n_2 and n_3 respectively. The following relationship holds good

1. $n_1 < n_2 < n_3$

2. $n_1 = n_3 < n_2$

3. $n_1 = n_2 = n_3$

4. $n_1 > n_2 > n_3$

Answer: 2. $n_1 = n_3 < n_2$

Q637: Consider the intermediate code given below:

1. $i = 1$

2. $j = 1$

3. $t_1 = 5 * i$

4. $t_2 = t_1 + j$

5. $t_3 = 4 * t_2$

6. $t_4 = t_3$

7. $a[t_4] = -1$

8. $j = j + 1$

9. if $j \leq 5$ goto(3)

10. $i = i + 1$

11. if $i < 5$ goto(2)

The number of nodes and edges in the control-flow-graph constructed for the above code, respectively, are

1.5 and 7

2.6 and 7

3.5 and 2

4.7 and 8

Answer: 2.6 and 7

Q638: Consider the join of a relation R with relation S. If R has m tuples and S has n tuples, then the maximum size of join is:

1.mn

2.m+n

3. $(m+n)/2$

4. $2(m+n)$

Answer: 1.mn

Q639: Consider the join of a relation R with relation S. If R has m tuples and S has n tuples, then the maximum size of join is:

1.mn

2.m + n

3.(m + n) / 2

4.2(m + n)

Answer: 1.mn

Q640: Consider the regular language $L = (111 + 11111)^*$. The minimum number of states in any DFA accepting this languages is:

1.3

2.5

3.8

4.9

Answer: 4.9

Q641: Consider the relation $R1(\text{employee_name}, \text{project_name}, \text{dependent_name})$. If $\{\{\text{employee_name} \twoheadrightarrow \text{project_name}\}, \{\text{employee_name} \twoheadrightarrow \text{dependent_name}\}\}$, what is the highest normal form it satisfies?

1.2NF

2.3NF

3.BCNF

4.4NF

Answer: 1.2NF

Q642: Consider the translation scheme shown below

S - T R

R - + T {print ('+');} R | e

T - num {print (num.val);}

Here num is a token that represents an integer and num.val represents the corresponding integer value. For an input string '9 + 5 + 2', this translation scheme will print

1.9 + 5 + 2

2.9 5 + 2 +

3.9 5 2 + +

4.+ + 9 5 2

Answer: 2.9 5 + 2 +

Q643: Consider two strings A = 'qpqrr' and B = 'pqprrp'. Let x be the length of the LCS between A and B and let y be the number of such longest common subsequences between A and B. Then x +

10y =

1.42 2.34 3.32 4.30

Answer: 2.34

Q644: Count function in SQL returns the number of

1.values

2.distinct values

3.groups

4.columns

Answer: 1.values

Q645: Count-to-Infinity problem occurs in

1. distance vector routing

2.short path first

3.link state routing

4.hierarchical routing

Answer: 1. distance vector routing

Q646: CPU Scheduling is the basis of _____ operating system

1.Batch

2.Real Time

3.Multi-programming

4.network

Answer: 3.Multi-programming

Q647: create table student_\$(id number(4), namee varchar2(10)); reponse would be

1.Error

2.Table created

3.Table created with error

4.Table created with data

Answer: 2.Table created

Q648: Creating additional function similar to template function is called

1.implicit specialization 2.explicit specialization 3.abstraction 4.template overriding

Answer: 4.template overriding

Q649: Cross-compiler is a compiler

1.which is written in a language that is same as the source language. 2.that runs on one computer but produces object code for different type of computer. 3.that generates object code for its host machine. 4.which is written in a language that is different from the source language.

Answer: 2.that runs on one computer but produces object code for different type of computer

Q650: Cryptanalysis is used

1.to find some insecurity in a cryptographic scheme

2.to increase the speed

3.to encrypt the data

4.none of the mentioned

Answer: 1.to find some insecurity in a cryptographic scheme

Q651: Cryptographic hash function takes an arbitrary block of data and returns

1.fixed size bit string

2.variable size bit string

3.both (a) and (b)

4.None

Answer: 1.fixed size bit string

Q652: Currently there is no single standard file type that can be used to play audio using the audio element consistently on all browsers. Which is the solution that the audio element provides to resolve this conflict?

1.Use JavaScript to determine the web browser in use 2.Use Adobe Flash to play the audio

3.Include multiple audio file formats in the src attribute 4.No Solution

Answer: nan

Q653: Data flow testing is a control structure testing technique where the criteria used to design test cases is that they

1. rely on basis path testing

2. exercise the logical conditions in a program module
3. select test paths based on the locations and uses of variables
4. focus on testing the validity of loop constructs

Answer: 2. exercise the logical conditions in a program module

Q654: Data independence means

1. data is defined separately and not included in programs.
2. programs are not dependent on the physical attributes of data
3. programs are not dependent on the logical attributes of data
4. programs are not dependent on both physical and logical attributes of data

Answer: 4. programs are not dependent on both physical and logical attributes of data

Q655: Data Members of the base class that are marked private:

1. does exist in memory when the object of the derived class is created
2. exist in memory when the object of the derived class is created
3. are visible in the derived class
4. are directly accessible in the derived class

Answer: 2.exist in memory when the object of the derived class is created

Q656: Data Members of the base class that are marked private:

1.does exist in memory when the object of the derived class is created 2.exist in memory when the object of the derived class is created

the derived class 3.are visible in the derived class 4.are directly accessible in the derived class

Answer: 2.exist in memory when the object of the derived class is created the derived class

Q657: Data Store Symbol in DFD represents a

1. Physical file

2.Data Structure

3. Logical file

4.ALL

Answer: 4.ALL

Q658: DB, DW and DD directives are used to place data in particular location or to simply allocate space without preassigning anything to space. The DW and DD directories are used to generate

- 1.full address of labels
- 2.offsets of full address of labels and variables
- 3.full address of variables
- 4.offsets

Answer: 2.offsets of full address of labels and variables

Q659: DCL stands for

- 1.Data Control Language
- 2.Data Console Language
- 3.Data Console Level
- 4.Data Control Level

Answer: 1.Data Control Language

Q660: Demand paged memory allocation

- 1.allows the virtual address space to be independent of the physical memory
- 2.allows the virtual address space to be a multiple of the physical memory size
- 3.allows deadlock to be detected in paging schemes

4.is present only in Windows NT

Answer: 1.allows the virtual address space to be independent of the physical memory

Q661: Desirable properties of relational database design include

1.All of the options

2.minimizing update anomalies

3.minimizing redundancy

4.minimizing insertion/deletion anomalies

Answer: 1.All of the options

Q662: Direction flag is used with

1.String instructions

2.Stack instructions.

3.Arithmetic instructions

4.Branch instructions

Answer: 1.String instructions

Q663: Divide and conquer mechanism is used in

1.selection sort 2.merge sort 3.quick and merge sorts 4.indexed sequential search

Answer: 3.quick and merge sorts

Q664: DML is provided for

1.Description of logical structure of database.

2.Addition of new structures in the database system.

3.Manipulation & processing of database.

4.Definition of physical structure of database system.

Answer: 3.Manipulation & processing of database.

Q665: Drop SQL clause

1.Drops only the values from the table

2.drops structure of the table along with values

3.None of the options

4.changes the structure of the table

Answer: 2.drops structure of the table along with values

Q666: Duality principle is used when SE is

1.square 2.symmetric 3.asymmetricd 4.translated

Answer: 2.symmetric

Q667: During business process engineering, three different architectures are examined

1.applications, data, technology infrastructure

2.communications, organization, financial infrastructure

3.

network, database, reporting structure

4. systems, requirements, data structure

Answer: 1.applications, data, technology infrastructure

Q668: Each counter of IC 8254 can work in -----different modes of operation

1.6

2.5

3.4

4.3

Answer: 1.6

Q669: ElGamal encryption system is

1.symmetric key encryption algorithm

2.asymmetric key encryption algorithm

3.not an encryption algorithm

4.none of the mentioned

Answer: 2.asymmetric key encryption algorithm

Q670: EPROM is generally erased by using

1.Ultraviolet rays

2.infrared rays

3.12 V electrical pulse

4.24 V electrical pulse

Answer: 1.Ultraviolet rays

Q671: Ethernet in metropolitan area network (MAN) can be used as

1.pure ethernet

2.ethernet over SDH

3.ethernet over MPLS

4.combination of all of the above mentioned

Answer: 4.combination of all of the above mentioned

Q672: Everyone on the software team should be involved in the planning activity so that we can

1.reduce the granularity of the plan

2.analyze requirements in depth

3.get all team members to "sign up" to the plan

4. begin design

Answer: 3.get all team members to "sign up" to the plan

Q673: Evolutionary software process models

1.Are not iterative in nature

2.Can easily accommodate product requirements changes

3.Generally produce throwaway systems

4.Are not specific to applications

Answer: 4.Are not specific to applications

Q674: Existing MAC protocols cannot be used in MANETs because of

1.Resource constrained nodes

2.Limited bandwidth

3.Lack of centralized control

4.All of the above

Answer: 4.All of the above

Q675: External Fragmentation of the file system

1. can be avoided by paging
2. occurs only if the file system is used improperly
3. can be removed by compaction
- 4.can be avoided by Segmentation

Answer: 1. can be avoided by paging

Q676: Find the output

```
#include < stdio.h >

int main()
{
    int tally=0;
    for(;;)
    {
        if(tally==10)
            break;
```



```
printf("%d ",++tally);  
  
}  
  
return 0;  
  
}
```

1.0 1 2 3 4 5 6 7 8 9 10

2.0 1 2 3 ... infinte times

3.1 2 3 4 5 6 7 8 9 10

4.1 2 3 4 5 6 7 8 9

Answer: 3.1 2 3 4 5 6 7 8 9 10

Q677: Find the output

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
int x=65;
```

```
const unsigned char c=(int)x;
```

```
printf("%c\n",c);
```

```
return 0;
```

```
}
```

1.Error

2.65

3.A

4.NULL

Answer: 3.A

Q678: Find the output

```
#include <stdio.h>
```

```
struct sample
```

```
{
```

```
int a=0;
```

```
char b='A';
```

```
float c=10.5;
```

```
};
```

```
int main()
```

```
{
```

```
struct sample s;
```

```
printf("%d,%c,%f",s.a,s.b,s.c);
```

```
return 0;
```

```
}
```

1.Error

2.0,A,10.5 3.0,A,10.500000

4.No Error, No Output

Answer: 1.Error

Q679: Find the output:

```
#include <stdio.h>

int main()
{
    int a=100;

    printf("%d\n"+1,a);

    printf("Value is = %d"+3,a);

    return 0;
}
```

1.Error

2.101,

Value is = 103

3.d

ue is = 100

4.100

100

Answer: 3.d ue is = 100

Q680: Find the output:

```
#include <stdio.h>

int main()
```

```
{  
  
int a=23;  
  
;  
  
;printf("%d",a);  
  
;  
  
return 0;  
  
}
```

1.23

2.Error

3.;23;

4.;23

Answer: 1.23

Q681: Find the output:

```
#include <stdio.h>
```

```
void main()
```

```
{  
  
const char var='A';  
  
++var;  
  
printf("%c",var);  
  
}
```

1.B

2.A

3.ERROR

4.66

Answer: 3.ERROR

Q682: FIND THE OUTPUT:

```
#include <stdio.h>

void main()

{

    int x=10;

    x+=(x++)+(++x)+x;

    printf("%d",x);

}
```

1.44

2.45

3.46

4.47

Answer: 2.45

Q683: Find the output:

```
#include <stdio.h>

void main()

{
```

```
int x=(20 || 40 ) && (10);  
  
printf("x= %d",x);  
  
}
```

1.x= 60

2.x= 70

3.x= 0

4.x= 1

Answer: 4.x= 1

Q684: Find the output:

```
#include <stdio.h>  
  
void main()  
{  
  
    char var=10;  
  
    printf("var is = %d",++var++);  
  
}
```

1.ERROR: can not modify var.

2.ERROR: L-Value required

3.12

4.ERROR: Expression syntax

Answer: 2.ERROR: L-Value required

Q685: First derivative approximation says that values of constant intensities must be

1.1 2.0 3.positive 4.negative

Answer: 2. 0

Q686: Flip-flop excitation tables shows that

1.For the given PS and NS what will be the inputs 2.For the given PS and NS what will be the outputs 3.For the given PS and NS what will be the type of flip-flops 4.For the given PS and NS what will be the values of NS and PS respectively

Answer: 4.For the given PS and NS what will be the values of NS and PS respectively

Q687: Following can be used to implement a SOP function without changing it into minterms

1.MUX 2.PLA 3.ROM 4.DeMUX

Answer: 4.DeMUX

Q688: For a well understood data processing application it is best to use

1.The waterfall model

2. prototyping model

3.the evolutionary model

4. the spiral model

Answer: 1.The waterfall model

Q689: For purposes of behavior modeling a state is any

1.consumer or producer of data.

2.data object hierarchy.

3. observable mode of behavior.

4. well defined process.

Answer: 3. observable mode of behavior.

Q690: Foreign Key is

1.A field in a table that matches a key field in another table

2.A field in a table that contains data that is also contained elsewhere in another table

3.A key that consists of more than one field

4.A field in a table that has the same name as a key field in another table

Answer: 1.A field in a table that matches a key field in another table

Q691: Frames of 1000 bits are sent over a 10^6 bps duplex link between two hosts. The propagation time is 25ms. Frames are to be transmitted into this link to maximally pack them in transit (within the link). What is the minimum number of bits, i will be required to represent the sequence numbers distinctly? Assume that no time gap needs to be given between transmission of two frames.

1. $i=2$

2. $i=3$

3. $i=4$

4. $i=5$

Answer: 4. $i=5$

Q692: FTP server listens for connection on port number

1.20

2.21

3.22

4.23

Answer: 2022-01-20 00:00:00

Q693: Functions that combines to produce $f(x,y)$

1.illumination and frequency 2.intensity and reflectance 3.illumination and radiance 4.illumination and reflectance

Answer: 4.illumination and reflectance

Q694: Generally Dynamic RAM is used as main memory in a computer system as it_____.

1.Consumes less power

2. has higher speed

3. has lower cell density

4. needs refreshing circuitry

Answer: 2. has higher speed

Q695: Generic process models are:

1.waterfall, componet-based, iterative

2.waterfall, structural, component-based

3.sequential, waterfall, iterative

4.component-based, object-oriented, iterative

Answer: 4

Q696: Given a comma-separated list of values in a string, which function from the given list can create an array of each individual value with a single call in PHP?

1.strstr()

2.extract

3.explode()

4.strtok()

Answer: 3

Q697: Given a hash table T with 25 slots that stores 2000 elements, the load factor α for T is_____

1.80 2.0 0.125 3.8000 4.1.25

Answer: 1

Q698: Given a variable \$email containing the string user@example.com, which of the following PHP statements would extract the string example.com?

- 1.substr(\$email, strpos(\$email, "@"));
2. strstr(\$email, "@");
- 3.strchr(\$email, "@");
- 4.substr(\$email, strpos(\$email, "@")+1);

Answer: 4

Q699: Given an array that represents elements of arithmetic progression in order. It is also given that one element is missing in the progression, the worst case time complexity to find the missing element efficiently is:

1. $\theta(n)$
2. $\theta(n \log n)$
3. $\theta(\log n)$
4. $\theta(1)$

Answer: 3

Q700: Given CF=0, BX=00111011 01110101 ROR BX,1. The result is

- 1.CF=1 BX=10011101 10111010
- 2.CF=1 BX=10100111 01101110
- 3.CF=0 BX=01001110 11011101
- 4.CF=0 BX=01010011 10110111

Answer: 1

Q701: Given the basic ER and relational models, which of the following is INCORRECT?

1. An attribute of an entity can have more than one value
2. An attribute of an entity can be composite
3. In a row of a relational table, an attribute can have more than one value
4. In a row of a relational table, an attribute can have exactly one value or a NULL value

Answer: 3

Q702: Given the Code segment CS = 1000H and the offset BX=0050H. Calculated physical address is -----

1. 10000H 2. 10050H 3. 11050H 4. 11000H

Answer: 2

Q703: Given the Extra segment ES = 52B9H and the offset BX=D470H. Calculated physical address is -----

1. 60000H 2. 70000H 3. 11000H 4. 11050H

Answer: 1

Q704: Given the frequency $f=1.5\text{MHz}$ for 8253 timer the value of time period T is

1.10ms 2.0.66us 3.1ms 4.100ms

Answer: 2

Q705: Given the functional dependencies, $\{AB \rightarrow CDE \text{ and } A \rightarrow E\}$, for relation schema $R = (A,B,C,D,E)$ we can infer the following:

1.A is a key for R

2.BE is a key for R

3.AB is a key for R

4.B is a key for R

Answer: 3

Q706: Given the language $L = \{ab, aa, baa\}$, which of the following strings are in L^* ?

1) abaabaaabaa

2) aaaabaaaa

3) baaaaabaaaab

4) baaaaabaa

1.1, 2 and 3

2.1, 2 and 4

3.1, 3 and 4

4.2, 3 and 4

Answer: 2

Q707: Grant and revoke are statements.

1.DDL

2.TCL

3.DCL

4.DML

Answer: 3

Q708: High speed ethernet works on

1.coaxial cable

2.twisted pair cable

3.optical fiber

4.none of the mentioned

Answer: 3

Q709: How an embedded system communicate with the outside world?

1.Memory

2.Output

3.Peripherals

4.Input

Answer: 3

Q710: How can we count the number of elements in an array?

1.Using sizeof() 2.count() 3.Writing a user defined function and using array_search() 4.using sizeof() and count()

Answer: 4

Q711: How can you specify default text in an input field?

1.Using JavaScript 2.Using the 'text' attribute 3.Using the 'placeholder' element 4.Using the 'placeholder' attribute

Answer: 4

Q712: How do I create PHP arrays in a HTML <form>?

1.< input name= MyArray[]/> 2.< input ="MyArray[]" /> 3.< input name="MyArray[]" /> 4.< input MyArray[] />

Answer: 3

Q713: How do substring() and substr() differ?

1.One is not a method of the String object. 2.substr() takes three arguments, substring() only two. 3.Only one accepts a desired string length as an argument. 4.Besides the spelling, nothing.

Answer: 3

Q714: How do we access the value of 'd' later? `$a = array('a', 3 => 'b', 1 => 'c', 'd');`

1.`$a[0]` 2.`$a[1]` 3.`$a[2]` 4.`$a[4]`

Answer: 4

Q715: How do we prevent margins, borders and padding from overlapping?

1.Setting zero paddings and margins 2.By displaying our list as block elements 3.Using table cells
4.By displaying our list as inline elements

Answer: 2

Q716: How do we submit form data without a Submit button?

1.Using `header()` function 2.Using Javascript 3.Using `fdf_set_submit_form_action()` function 4.using
`header()` and javascript

Answer: 4

Q717: How do you check queue is full in array implementation

1.`if(rear==size)` 2.`if(front==size)` 3.`if(rear== -1)` 4.`if(front== -1)`

Answer: 1

Q718: How do you get information from a form that is submitted using the "get" method?

1.Request.QueryString; 2.\$_GET[]; 3.Request.Form; 4.\$_POST[];

Answer: 2

Q719: How is a J-K flip-flop made to toggle?

1.J = 0, K = 0

2.J = 0, K = 1

3.J = 1, K = 0

4.J = 1, K = 1

Answer: 4

Q720: How is the protection and security for an embedded system made?

1.Security chips

2.Memory disk security

3.IPR

4.OTP

Answer: 3

Q721: How many assumptions have to meet for a rate monotonic scheduling?

1.3

2.4

3.5

4.6

Answer: 4

Q722: How many diagrams are here in Unified Modelling Language?

1.six

2.seven

3.eight

4.nine

Answer: 4

Q723: How many different states does a 3-bit asynchronous counter have?

1. 2 2. 4 3. 8 4. 16

Answer: 3

Q724: How many flip-flops are required to construct a mod10 counter?

1. 10 2. 8 3. 5 4. 4

Answer: 4

Q725: How many flip-flops are required to make a MOD-32 binary counter?

1. 3 2. 4 3. 5 4. 6

Answer: 3

Q726: How many instances of an abstract class can be created?

1. 13 2. 5 3. 1 4. 0

Answer: 4

Q727: How many minimum states are required in a DFA to find whether a given binary string has

odd number of 0's or not, there can be any number of 1's.

1.1

2.2

3.3

4.4

Answer: 2

Q728: How many nodes in a tree have no ancestors.

1. 2

2. n

3. 1

4. 0

Answer: 3

Q729: How many operating modes are available in 8253A.

1. 1

2. 2

3. 6

4. 3

Answer: 3

Q730: How many times is a do while loop guaranteed to loop?

1.Variable

2.1

3.0

4.Infinity

Answer: 2

Q731: How many transistors does the 8086 have

1.29,000 2.10,000 3.129,000 4.110,000

Answer: 1

Q732: How to create a Date object in JavaScript?

1.dateObjectName = new Date([parameters]) 2.dateObjectName.new Date([parameters])

3.dateObjectName := new Date([parameters]) 4.dateObjectName Date([parameters])

Answer: 1

Q733: How to create a memory without a name during the execution of the program?

1.malloc() 2.Queue 3.stack 4.list

Answer: 1

Q734: How will you free the allocated memory ?

1.remove(var-name); 2.free(var-name); 3.delete(var-name); 4.dalloc(var-name);

Answer: 2

Q735: How will you handle the overflow condition of a linked queue through code (note: new_node is a newly created node in a memory)

1.if(rear==size) 2.if(new_node==0) 3.if(front==size) 4.if(new_node==null)

Answer: 1

Q736: HTTP client requests by establishing a _____ connection to a particular port on the server.

1.user datagram protocol

2.transmission control protocol

3.broader gateway protocol

4.RIP

Answer: 2

Q737: IC 8237 has -----many pins

1.40

2.28

3.24

4.20

Answer: 1

Q738: IC 8257 has -----many channels for data transfer

1.1

2.2

3.3

4.4

Answer: 4

Q739: Identify different segments in a program

1.only code segment 2.data and code segment 3.only data segment 4.data, code, stack and extra segments

Answer: 4

Q740: Identify the accurate control word for operate counter 0, Read/Write LSB only, Mode 2, BCD countdown.

1.00010111B 2.0001X111B 3.00010101B 4.00110111B

Answer: 2

Q741: Identify the addressing mode for the instruction MOV AH,47H

1.Immediate addressing mode 2.Direct addressing mode 3.Based addressing mode 4.Indirect addressing mode

Answer: 1

Q742: Identify the proper data direction and modes of operation of the 8255 ports if the control word written into it is 9BH.

1.Port A as output 2.Port C lower as output 3.Port C upper as input 4.Port B as output

Answer: 3

Q743: If a class B network on the Internet has a subnet mask of 255.255.248.0, what is the maximum number of hosts per subnet?

1.1024

2.1023

3.2046

4.2047

Answer: 3

Q744: If a class C is derived from class B, which is derived from class A, all through public inheritance, then a class C member function can access

1.protected and onlineexam.data only in C and B 2.protected and onlineexam.data only in C.
3.private data in A and B. 4.protected data in A and B.

Answer: 4

Q745: If a constructor function is defined in private section of a class, then

1.The object cannot be created 2.Only its member functions and friends may declare objects of the class 3.Only its friends may declare objects of the class 4.Only its member functions may declare objects of the class

Answer: 1 and 2

Q746: If AL= 7FH and instruction ADD AL,1 is given, specify the contents of the six status flag

1.CF=0,PF=0,AF=1,ZF=0,SF=1,OF=1 2.CF=0,PF=1,AF=0,ZF=0,SF=1,OF=1
3.CF=0,PF=1,AF=1,ZF=0,SF=1,OF=1 4.CF=0,PF=0,AF=1,ZF=0,SF=1,OF=0

Answer: 1

Q747: If AL=C0H, Determine the content of the register AL after SAL AL,1 instruction is executed.

1.E0H 2.80H 3.0CH 4.0EH

Answer: 2

Q748: If all page frames are initially empty, and a process is allocated 3 page frames in real memory and references its pages in the order 1 2 3 2 4 5 2 3 2 4 1 and the page replacement is FIFO, the total number of page faults caused by the process will be _____

1.10

2.7

3.8

4.9

Answer: 4

Q749: If all tasks must be executed in the same time-span, what type of cohesion is being exhibited?

1.Functional Cohesion

2.Temporal Cohesion

3.Functional Cohesion

4.Sequential Cohesion

Answer: 2

Q750: If class A is friend of class B and if class B is friend of class C, which of the following is true?

1.Class C is friend of Class A 2.Class A is friend of Class C 3.Class A and Class C don't have any friend relationship 4.Class A and Class C are mutual friends

Answer: 3

Q751: If every requirement stated in the Software Requirement Specification (SRS) has only one interpretation, SRS is said to be

1.correct.

2. unambiguous.

3.consistent.

4.verifiable.

Answer: 2

Q752: If inspected in a browser, what will be the total width of the div in the following code snippet?

```
#container { width: 600px; border: 2px solid #CCCCCC; padding: 30px 20px; margin: 20px 10px 40px 10px;}
```

1.664px 2.660px 3.644px 4.600px

Answer: 1

Q753: If L and L' are recursively enumerable, then L is

1.regular

2.context-free

3.context-sensitive

4. recursive

Answer: 4

Q754: If M1 machine recognizing L with n states, then M2 recognizing L^* constructed Using Thompson construction will have ----- states.

1. n

2.n+1

3.n+2

4.n-1

Answer: 2

Q755: If p and q are assigned the values 2 and 3 respectively then the statement $P = q++$

1.assigns a value 5 to p 2.assigns a value 3 to p 3.gives an error message 4.assigns a value 4 to p

Answer: 2

Q756: If para1 is the DOM object for a paragraph, what is the correct syntax to change the text within the paragraph?

1."New Text"? 2.`para1.value="New Text";` 3.`para1.firstChild.nodeValue= "New Text";`
4.`para1.nodeValue="New Text";`

Answer: 2

Q757: If the class name is X, what is the type of its "this" pointer?

1.X* 2.`const X*` 3.X& 4.X* `const`

Answer: 3

Q758: If the disk size is 2^{30} bytes and block size is 2^{12} bytes then find how many such blocks are there?

1. 2^{42}

2. 2^{18}

3. 2^{360}

4.2^30

Answer: 2

Q759: If the PIC outputs the type number of C8H, the CPU will retrieve the vector stored in the address -----

1.00320H - 00323H 2.00324H - 00327H 3.00223H - 00226H 4.00140H - 00143H

Answer: nan

Q760: If the size of logical address space is 2 to the power of m, and a page size is 2 to the power of n addressing units, then the high order _____ bits of a logical address designate the page number, and the _____ low order bits designate the page offset.

1.m,n

2.n,m

3.m-n,m

4.m-n,n

Answer: 4

Q761: If there are n relations how many number of join conditions has to be applied to retrieve the

data from all the n relations?

1. $N+1$

2. N

3. $N-1$

4. A Number in the range 0 to N .

Answer: 3

Q762: If we create a file by 'ifstream', then the default mode of the file is _____

1. `ios :: out` 2. `ios :: in` 3. `ios :: app` 4. `ios :: binary`

Answer: 1

Q763: If $X \rightarrow Y$ and $X \rightarrow Z$ then

1. $Y \rightarrow Z$

2. $Z \rightarrow Y$

3. $X \rightarrow YZ$

4. Doesn't hold

Answer: 3

Q764: If $x \rightarrow y$ then $y \rightarrow x$. This statement is

1.True

2.False

3.Can't Say

4.Doesn't hold

Answer: 3

Q765: IF Y is a subset of X then

1. $X \rightarrow Y$

2. $Y \rightarrow X$

3. $Y \rightarrow \rightarrow X$

4.X is a sub set of Y

Answer: 2

Q766: If you have an empty queue and you insert characters 'r', 'a', 't' (in this order only), what is the order of the characters when you dequeue all the elements?

1.'r', 'a', 't' 2.'t', 'a', 'r' 3.'r', 't', 'a' 4.'t', 'r', 'a'

Answer: 1

Q767: IMUL source is a signed _____

1.multiplication

2.addition

3.subtraction

4.division

Answer: 1

Q768: In 8086 microprocessor one of the following statements is not true

1.Coprocessor is interfaced in MAX mode 2.Coprocessor is interfaced in MIN mode 3.I/O can be interfaced in MAX / MIN mode 4.Supports pipelining

Answer: 2

Q769: In 8086 microprocessor the following has the highest priority among all type interrupts

1.TYPE 255 2.DIV 0 3.NMI 4.OVER FLOW

Answer: 3

Q770: In 8086, Example for Non maskable interrupts are _____.

1.TRAP

2.RST6.5

3.INTR

4.RST6.6

Answer: 1

Q771: In a bottom-up evaluation of a syntax directed definition, inherited attributes can

1.always be evaluated

2.be evaluated only if the definition is L-attributed

3.be evaluated only if the definition has synthesized attributes

4.never be evaluated

Answer: 2

Q772: In a C program, the following variables are defined:

float x = 2.17;

double y = 2.17;

long double z = 2.17;

Which of the following is correct way for printing these variables via printf.

1.printf("%f %lf %LLf",x,y,z);

2.printf("%f %ff %Lff",x,y,z);

3.printf("%f %Lf %ILf",x,y,z);

4.printf("%f %lf %Lf",x,y,z);

Answer: 4

Q773: In a circular linked list

1.components are arranged hierarchically 2.there is no beginning and no end 3.forward and backward traversal within the list is permitted 4.components are arranged from top to bottom

Answer: 2

Q774: In a compiler, keywords of a language are recognized during

- 1.parsing of the program
- 2.the code generation
- 3.the lexical analysis of the program
- 4.dataflow analysis

Answer: 3

Q775: In a conceptual model for a university, which of the following could most appropriately be represented via a recursive relationship?

- 1.Student credit hours
- 2.Course prerequisites
- 3.Parking sticker assignments
- 4.Final exam schedules

Answer: 2

Q776: In a connected graph, a bridge is an edge whose removal disconnects a graph. Which one of the following statements is True?

1.A tree has no bridge 2.A bridge cannot be part of a simple cycle 3.Every edge of a clique with size ≥ 3 is a bridge (A clique is any complete subgraph of a graph) 4.A graph with bridges cannot have a cycle

Answer: 4

Q777: In a DMA write operation the data is transferred

1.from I/O to memory

2.from memory to I/O

3.from memory to I/O

4.from I/O to I/O

Answer: 1

Q778: In a microprocessor, the service routine for a certain interrupt starts from a fixed location of

memory which cannot be externally set, but the interrupt can be delayed or rejected. Such an interrupt is

1. maskable and non-vectored
2. non-maskable and vectored
3. maskable and vectored
4. non-maskable and non-vectored

Answer: 3

Q779: In a network of LANs connected by bridges, packets are sent from one LAN to another through intermediate bridges. Since more than one path may exist between two LANs, packets may have to be routed through multiple bridges. Why is the spanning tree algorithm used for bridge-routing?

1. For shortest path routing between LANs
2. For avoiding loops in the routing paths
3. For fault tolerance
4. For minimizing collisions

Answer: 2

Q780: In a syntax directed translation schema, if value of an attribute of a node is function of the values of the attributes of its children, then it is called

1.Inherited attributes 2.Synthesized attributes 3.Canonical attributes 4.Derived attributes

Answer: 2

Q781: In a token ring network the transmission speed is 10^7 bps and the propagation speed is 200 metres/micro second. The 1-bit delay in this network is equivalent to:

1.500 metres of cable.

2.200 metres of cable.

3.20 metres of cable.

4.50 metres of cable.

Answer: 3

Q782: In a virtual memory environment

1.segmentation and page tables are stored in the cache and do not add any substantial overhead

2.slow down the computer system considerable

3.segmentation and page tables are stored in the RAM

4. only page table is stored in cache

Answer: 1

Q783: In access lists and groups which one of the following is correct for the 'RWX' notation of the order 'group, owner, public'

1. 111110001

2. 110111001

3. 001111110

4. 001110111

Answer: 2

Q784: In an array representation of binary tree, the left child of i th node is located at

1. $2i+2$ 2. $(i-1)/2$ 3. $(i-2)/2$ 4. $2i+1$

Answer: 4

Q785: In an array representation of binary tree, the right child of i th node is located at

1. $(i-2)/2$ 2. $(i-1)/2$ 3. $2i+2$ 4. $2i+1$

Answer: 3

Q786: In an E-R diagram an entity set is represent by a

1. rectangle

2. ellipse

3. diamond box

4. circle

Answer: 1

Q787: In an E-R diagram attributes are represented by

1. rectangle

2. square

3. ellipse

4. triangle

Answer: 3

Q788: In any undirected graph, the sum of the degrees of all nodes is:

1.is twice number of edges 2.is always ODD 3.need not be even 4.must be even

Answer: 1

Q789: In Assembly language programming, minimum number of operands required for an instruction is/are

1.Zero

2.One

3.Two

4.Three

Answer: 1

Q790: In asynchronous serial communication the physical layer provides

1.start and stop signalling

2.flow control

3.both (a) and (b)

4.none of the mentioned

Answer: 3

Q791: In binary heap, whenever the root is removed then the rightmost element of last level is replaced by the root. Why?

1.To make sure that it is still complete binary tree 2.It is the easiest possible way 3.Because left and right subtree might be missing 4.maximum value is contained by the root node

Answer: 2

Q792: In case of entity integrity, the primary key may be

1.not Null

2.Null

3.a foreign key

4.any value

Answer: 1

Q793: In collaborative requirements gathering, the facilitator

1.cannot be a member of the software team

2.cannot be a customer

3.controls and facilitates the process

4. must be an outsider

Answer: 3

Q794: In context of OSI or TCP/IP computer network models, which of the following is false?

1.Major difference between LAN and WAN is that the later uses switching element 2.Network layer is connection oriented 3.A repeater is used just to forward bits from one network to another one 4.A gateway is used to connect incompatible networks

Answer: 2

Q795: In cryptography, the order of the letters in a message is rearranged by

1.transpositional ciphers

2.substitution ciphers

3.both (a) and (b)

4.none of the mentioned

Answer: 1

Q796: In Ethernet when Manchester encoding is used, the bit rate is:

1.Half the baud rate.

2.Twice the baud rate.

3.Same as the baud rate.

4.Grows exponentially

Answer: 1

Q797: In FTP protocol, client contacts server using _____ as the transport protocol.

1.transmission control protocol

2.user datagram protocol

3.datagram congestion control protocol

4.stream control transmission protocol

Answer: 1

Q798: In general tree to binary tree conversion, the two links of the binary tree node points to

1.two leaf nodes in the general tree 2.its right child and sibling in the genral tree 3.its left child and sibling in the general tree 4.its left and right child in the general tree

Answer: 4

Q799: In HTTP pipelining

1.multiple HTTP requests are sent on a single TCP connection without waiting for the corresponding responses

2.multiple HTTP requests can not be sent on a single TCP connection

3.multiple HTTP requests are sent in a queue on a single TCP connection

4.none of the mentioned

Answer: 1

Q800: In interactive environments such as time-sharing systems, the primary requirement is to provide reasonably good response time and in general, to share system resources equitably. In such situations, the scheduling algorithm that is most popularly applied is _____.

1.Shortest Remaining Time Next (SRTN) Scheduling

2.Priorities Based Preemptive Scheduling

3.Round Robin Scheduling

4.First Come First Serve

Answer: 3

Q801: In javascript, RegExp Object Method test() is used to search a string and returns _____

1.true or false 2.found value 3.index 4.Matched or not matched

Answer: 1

Q802: In linear search algorithm the Worst case occurs when

1.The item is somewhere in the middle of the array 2.The item is not in the array at all 3.The item is the last element in the array 4.The item is the last element in the array or is not there at all

Answer: 4

Q803: In MACAW, Data Sending (DS) frame is of size

1.120 Bytes

2.30 Bytes

3.23 Byte

4.35 Byte

Answer: 2

Q804: In max mode, control bus signal So,S1 and S2 are sent out in _____ form

1.shared

2.decoded

3.encoded

4.unshared

Answer: 3

Q805: In `mysql_fetch_array()`, if two or more columns of the result have the same field names, what action is taken?

1.the first column will take precedence

2.the column is skipped

3.the last column will take precedence

4.an error is thrown.

Answer: 3

Q806: In operator precedence parsing , precedence relations are defoned

1.To delimit the handle 2.For all pair of terminals 3.For all pair of non terminals 4.Only for a certain pair of terminals

Answer: 3

Q807: In PHP, array values are keyed by _____ values (called indexed arrays) or using _____ values (called associative arrays). Of course, these key methods can be combined as well.

- 1.Float, string
- 2.Positive number, negative number
- 3.String, Boolean
- 4.Integer, String

Answer: 4

Q808: In PHP, which of the following function is used to insert content of one php file into another php file before server executes it

- 1.include[]
- 2.#include()
- 3.include()
- 4.#include{}

Answer: 3

Q809: In Priority Scheduling a priority number (integer) is associated with each process. The CPU is allocated to the process with the highest priority (smallest integer = highest priority). The problem of, Starvation ? low priority processes may never execute, is resolved by _____.

- 1.Terminating the process.
- 2.Aging

3.Mutual Exclusion

4.Semaphore

Answer: 2

Q810: In software engineering development, if there are no applicable theories, people often use
adhoc approach.

1.True

2.False

3. 4.

Answer: 1

Q811: In software quality assurance work there is no difference between software verification and
software validation.

1.true

2.false

3. 4.

Answer: 2

Q812: In the absolute the addressing mode

- 1.The operand is inside the instruction
- 2.The address of the operand is inside the instruction
- 3.The register containing the address of the operand is specified inside the instruction
- 4.The location of the operand is implicit

Answer: 2

Q813: In the architecture of a database system external level is the

- 1.view level
- 2.conceptual level
- 3.logical level
- 4.physical level

Answer: 1

Q814: In the context of abstract-syntax-tree (AST) and control-flow-graph (CFG), which one of the

following is True?

1. In both AST and CFG, let node N2 be the successor of node N1. In the input program, the code corresponding to N2 is present after the code corresponding to N1
2. For any input program, neither AST nor CFG will contain a cycle
3. Each node in AST and CFG corresponds to at most one statement in the input program
4. The maximum number of successors of a node in an AST and a CFG depends on the input program

Answer: 4

Q815: In the context of object-oriented software engineering a component contains

1. attributes and operations
2. instances of each class
3. roles for each actor (device or user)
4. a set of collaborating classes

Answer: 4

Q816: In the following code snippet, what is the correct value of the left margin? `margin: 10px 5px 20px 15px;`

1. 10px
2. 5px
3. 20px
4. 15px

Answer: 4

Q817: In the multi-programming environment, the main memory consisting of _____ number of process.

1.Greater than 100

2.only one

3.Greater than 50

4.More than one

Answer: 4

Q818: In the network HTTP resources are located by

1.uniform resource identifier

2.unique resource locator

3.unique resource identifier

4.unique resource identifier

Answer: 1

Q819: In the operation read_item(x), what does x mean?

1.a file

2.a record

3.a disk block

4.all of the options

Answer: 4

Q820: In the running state

1.only the process which has control of the processor is found

2.all the processes waiting for I/O to be completed are found

3.all the processes waiting for the processor are found

4.everything in these options are found

Answer: 1

Q821: In the slow start phase of the TCP congestion control algorithm, the size of the congestion

window

1.does not increase

2.increases linearly

3.increases quadratically

4.increases exponentially

Answer: 4

Q822: In the spiral model 'risk analysis' is performed

1.In the first loop

2.in the first and second loop

3.In every loop

4.before using spiral model

Answer: 3

Q823: In tunnel mode IPsec protects the

1.entire IP packet

2.IP header

3.IP payload

4.none of the mentioned

Answer: 1

Q824: In what type of coupling, the complete data structure is passed from one module to another?

1.Control Coupling

2.Stamp Coupling

3.External Coupling

4.Content Coupling

Answer: 2

Q825: In which addressing mode the operand is given explicitly in the instruction

1.Absolute

2. Immediate

3. Indirect

4. Direct

Answer: 2

Q826: In which case is it mandatory to provide a destructor in a class?

1.Class for which copy constructor is defined 2.Class for which two or more than two objects will be created 3.Almost in every class 4.Class whose objects will be created dynamically

Answer: 4

Q827: In which mode FTP, the client initiates both the control and data connections.

1.active mode

2.passive mode

3.active mode and passive mode

4.none of the mentioned

Answer: 2

Q828: In which topology, if there are n devices in a network, each device has $n-1$ ports for cables?

1.Mesh 2.Star 3.Ring 4.Bus

Answer: 1

Q829: In which year, 8086 was introduced?

1.1978

2.1979

3.1977

4.1981

Answer: 1

Q830: In win-win negotiation, the customer's needs are met even though the developer's need may not be.

1.TRUE

2.FALSE

3. 4.

Answer: 2

Q831: In wireless distribution system

1.multiple access point are inter-connected with each other

2.there is no access point

3.only one access point exists

4.none of the mentioned

Answer: 1

Q832: In wireless network an extended service set is a set of

1.connected basic service sets

2.all stations

3.all access points

4.all nodes

Answer: 1

Q833: Information retrieval is faster from

1.Floppy disk

2.Magnetic tape

3.Hard disk

4.CD

Answer: 3

Q834: Insert into Emp(101, 'XXX') gives the following error

1.missing Select keyword

2.Missing Values

3.both of the errors

4.No of the errors

Answer: 2

Q835: int main()

{

int x,y;

x=(100,200);

y=100,200;

printf("x=%d,y=%d",x,y);

return 0;

}

Find the output

1.x=100,y=200

2.x=200,y=200

3.ERROR

4.x=200,y=100

Answer: 4

Q836: Interaction Diagram is a combined term for

1.Sequence Diagram + Collaboration Diagram

2.Activity Diagram + State Chart Diagram

3.Deployment Diagram + Collaboration Diagram

4.None

Answer: 1

Q837: Internet Explorer uses property to create transparent images.

1.-moz-opacity:x 2.filter: alpha(opacity=x) 3.filter: beta(opacity=x) 4.-IE-opac:y

Answer: 2

Q838: Interpolation search is an improved variant of binary search.

It is necessary for this search algorithm to work that data collection should be

1.in sorted form and equally distributed 2.in sorted form and but not equally distributed 3.equally distributed but not sorted 4.unsorted and not evenly distributed

Answer: 1

Q839: IPSec is designed to provide the security at the

1.transport layer

2.network layer

3.application layer

4.session layer

Answer: 2

Q840: It is difficult to design asynchronous sequential circuit because.

1.External clock is to be provided 2.It is using Flip flops 3.It is more complex 4.Generally they involve stability problem

Answer: 4

Q841: It is ok to have a single ideal approach to develop a software.

1.True

2.False

3. 4.

Answer: 1. True

Q842: It would be ideal if all of computer science theories can be used in software engineering.

1.False

2.True

3. 4.

Answer: 1. False

Q843: JavaScript RegExp Object has modifier 'i' to _____

1.Perform case-sensitive matching 2.Perform case-insensitive matching 3.Perform both case-sensitive & case-insensitive matching 4.None of the these

Answer: 2

Q844: Join is equal to

1.Cartesian Product

2.Combination of Union and Cartesian product

3.Combination of selection and Cartesian product

4.Combination of intersection and Cartesian product

Answer: 4

Q845: K-map follow following code for marking adjacent variables

1.84-2-1

2.Gray Code 3.2421 4.8421

Answer: 2

Q846: Let G be a weighted connected undirected graph with distinct positive edge weights.If every edge weight is increased by the same value, then which of the following statements is/are TRUE ?

P: Minimum spanning tree of G does not change. Q: Shortest path between any pair of vertices does not change

1.P Only

2.Q Only

3.Neither P nor Q

4.Both P and Q

Answer: 1

Q847: Let E1 and E2 be two entities in an E/R diagram with simple single-valued attributes. R1 and

R2 are two relationships between E1 and E2, where R1 is one-to-many and R2 is many-to-many. R1 and R2 do not have any attributes of their own. What is the minimum number of tables required to represent this situation in the relational model?

1.2

2.3

3.4

4.5

Answer: 2022-02-03 00:00:00

Q848: Let G be a graph with n vertices and m edges, What is the tightest upper bound on the running time on Depth First Search of G? Assume that the graph is represented using adjacency matrix

1.O(n) 2.O(m+n) 3.O(mn) 4.O(n²)

Answer: 4

Q849: Let G be the CFG, l be the number of left most derivations, r be the number of right most derivations and P be the number of parse trees. Assume l, r and P are computed for a particular string. For a given CFG 'G' and given string 'w', what is the relation between l, P, r ?

1.l=P=r

2.l<=P<=r

$$3. l \geq P \leq r$$

$$4. l \leq P \leq r$$

Answer: 1

Q850: Let $G(x)$ be the generator polynomial used for CRC checking. What is the condition that should be satisfied by $G(x)$ to detect odd number of bits in error?

1. $G(x)$ contains more than two terms

2. $G(x)$ does not divide $1+x^k$, for any k not exceeding the frame length

3. $1+x$ is a factor of $G(x)$

4. $G(x)$ has an odd number of terms.

Answer: 3

Q851: Let L_1 be a recursive language, and let L_2 be a recursively enumerable but not a recursive language. Which one of the following is TRUE?

L_1' \rightarrow Complement of L_1

L_2' \rightarrow Complement of L_2

1. L_1' is recursive and L_2' is recursively enumerable

2. L_1' is recursive and L_2' is not recursively enumerable

3. L_1' and L_2' are recursively enumerable

4. L_1' is recursively enumerable and L_2' is recursive

Answer: 2

Q852: Let P be a QuickSort Program to sort numbers in ascending order using the first element as pivot, Let t_1 and t_2 be the number of comparisons made by P for the inputs $\{1, 2, 3, 4, 5\}$ and $\{4, 1, 5, 3, 2\}$ respectively, Which one of the following holds?

1. $t_1=5$ 2. $t_1>t_2$ 3. t_1 4. $t_1=t_2$

Answer: 2

Q853: Let $T(n)$ be the function defined by $T(n) = 1$ and $T(n) = 2T(n/2) + n$, which of the following is TRUE ?

1. $T(n) = O(n)$ 2. $T(n) = O(\log^2 n)$ 3. $T(n) = O(n)$ 4. $T(n) = O(n^2)$

Answer: 3

Q854: Let w be any string of length n in $\{0,1\}^*$. Let L be the set of all substrings of w . What is the minimum number of states in a non-deterministic finite automaton that accepts L ?

1. $n+1$

2. n

3. $n-1$

4. $2n+1$

Answer: 1

Q855: Local and loop optimization in turn provide motivation for

1. Peephole optimization 2. DFA and Constant folding 3. Basic Code Analysis 4. Data flow analysis

.

Answer: 4

Q856: LOCK prefix is used most often

1. during normal execution. 2. during DMA accesses 3. during interrupt servicing. 4. during memory accesses

Answer: 3

Q857: Logical addressing is used in _____ layer

1.Network 2.Transport 3.Physical 4.Session

Answer: 1

Q858: Loop testing is a control structure testing technique where the criteria used to design test cases is that they

1.rely basis path testing

2.exercise the logical conditions in a program module

3.select test paths based on the locations and uses of variables

4. focus on testing the validity of loop constructs

Answer: 3

Q859: Magnetic tapes are good storage media for

1. backup and low volume data

2.backup and high volume data

3.storing original but low volume data

4.storing original but high volume data

Answer: 2

Q860: Manager salary details are hidden from the employee. This is

1.Conceptual level data hiding 2.Physical level data hiding 3.External level data hiding 4.None of mentioned

Answer: 3

Q861: Many of the tasks from the generic task sets for analysis modeling and design can be conducted in parallel with one another.

1.TRUE

2.FALSE

3. 4.

Answer: 1

Q862: Match all items in Group 1 with correct options from those given in Group 2.

Group 1

Group 2

P. Regular expression

1. Syntax analysis

Q. Pushdown automata

2. Code generation

R. Dataflow analysis

3. Lexical analysis

S. Register allocation

4. Code optimization

1. P-4, Q-1, R-2, S-3

2. P-3, Q-1, R-4, S-2

3. P-3, Q-4, R-1, S-2

4. P-2, Q-1, R-4, S-3

Answer: 2

Q863: Match the following:

List-I

List-II

A. Lexical analysis

1. Graph coloring

B. Parsing

2. DFA minimization

C. Register allocation

3. Post-order traversal

D. Expression evaluation

4. Production tree

Codes:

A B C D

(a) 2 3 1 4

(b) 2 1 4 3

(c) 2 4 1 3

(d) 2 3 4 1

1.a

2.b

3.c

4.d

Answer: 3

Q864: Memory elements in clocked sequential circuits are called.

1.latches 2.gates 3.signals 4.flipflop

Answer: 4

Q865: Memory unit accessed by content is called_____

1.Read only memory

2.Programmable Memory

3.Virtual Memory

4.Associative Memory

Answer: 4

Q866: Military vehicles on a battlefield with no existing infrastructure will deploy network.

1.MANET

2. Cell Network

3.LAN

4.Wi-Fi

Answer: 1

Q867: Mode of communication in which transmission takes place in both directions, but only in one direction at a time is called_____

1.simplex 2.four wired 3.full duplex 4.half-duplex

Answer: 4

Q868: Modifying the software to match changes in the ever changing environment is called

1.adaptive maintenance

2.corrective maintenance

3.perfective maintenance

4.preventive maintenance

Answer: 1

Q869: Most software continues to be custom built because

1.Component reuse is common in the software world.

2. Reusable components are too expensive to use.

3.Software is easier to build without using someone else's components

4.Off-the-shelf software components are unavailable in many application domains.

Answer: 4

Q870: Multiple choice examination answer sheets can be evaluated automatically by

1. Optical Mark Reader

2.Optical Character Reader

3.Magnetic tape reader

4. Magnetic ink character reader.

Answer: 1

Q871: Multiple object can be sent over a TCP connection between client and server in

1.persistent HTTP

2.nonpersistent HTTP

3.both persistent HTTP and nonpersistent HTTP

4.p-persistent HTTP

Answer: 1

Q872: Multiple variable declaration of same data type can be avoided by?

1.array 2.identifiers 3.functions 4.Pointer

Answer: 1

Q873: Network layer firewall works as a

1.frame filter

2.packet filter

3.both (a) and (b)

4.none of the mentioned

Answer: 2

Q874: Network models are complicated by physical keys, but the relation model is

1.Slower because it uses logical keys 2.Slower because it uses physical keys 3.Faster because it uses physical keys 4.Faster because it uses logical keys

Answer: 4

Q875: Network operating system that does not support symmetric multi-processing (SMP) is

1.Banyan (VINES) 2.Microsoft NT advanced server 3.SCO Unix 4.Novell Network 3.X

Answer: 4

Q876: NOR Gate does NOT follow

1.DeMorgan's Theorem 2.Associative Law 3.Commutative Law 4.Distributive Law

Answer: 2

Q877: Normalisation of database is used to

1.Minimise Errors 2.Improve Security 3.Eliminate redundancy 4.Improve security

Answer: 3

Q878: Number of the times the instruction sequence below will loop before coming out of loop is,

MOV AL, 00h A1: INC AL JNZ A1

1.255 2.01 3.00 4.256

Answer: 4

Q879: ODBC stands for

1.Object Database Connectivity.

2.Oral Database Connectivity.

3.Oracle Database Connectivity.

4.Open Database Connectivity.

Answer: 4

Q880: One application of a digital multiplexer is to facilitate:

1.data generation 2.serial-to-parallel conversion 3.data selector 4.parity checking

Answer: 3

Q881: One of the fault base testing techniques is

1.unit testing.

2.beta testing.

3.Stress testing.

4.mutation testing.

Answer: 4

Q882: One of the header fields in an IP datagram is the Time to Live (TTL) field. Which of the following statements best explains the need for this field?

- 1.It can be used to prioritize packets
- 2.It can be used to reduce delays
- 3.It can be used to optimize throughput
- 4.It can be used to prevent packet looping

Answer: 4

Q883: One of the main advantage of using src attribute is

- 1.It becomes self-cached
- 2.It makes the HTML file modular
- 3.It restricts manipulation in the HTML file
- 4.It simplifies the HTML files

Answer: 4

Q884: One of the purposes of using intermediate code in compilers is to

1.make parsing and semantic analysis simpler

2.improve error recovery and error reporting

3.increase the chances of reusing the machine-independent code optimizer in other compilers.

4.improve the register allocation.

Answer: 3

Q885: overloading + operator requires return type as object because,

1.reference parameter has to be returned 2.binary addition requires that 3.all overloading functions require that 4.chain of additions

Answer: 1

Q886: Overloading involves writing two or more functions with _____

1.different names and different argument lists 2.different names and the same argument list 3.the same name and different argument lists 4.the same name and the same argument list

Answer: 3

Q887: Overloading the function operator

1.usually make use of a constructor that takes arguments. 2.allows you to create objects that act syntactically like functions. 3.requires a class with an overloaded operator. 4.requires a class with an overloaded [] operator.

Answer: 4

Q888: Packets of the same session may be routed through different paths in:

1.TCP, but not UDP

2.TCP and UDP

3.UDP, but not TCP

4.Neither TCP nor UDP

Answer: 2

Q889: Paging _____

1.solves the memory fragmentation problem

2.allows modular programming

3.allows structured programming

4.avoids deadlock

Answer: 1

Q890: Parallelism and concurrency is fully achieved in which of the following thread model

1.Many-to-one model

2.Many-to-many

3.one-to-one model

4.All the models

Answer: 1

Q891: Passing the request from one schema to another in DBMS architecture is called as _____

1.Mapping

2.Communication

3.Relational

4.network

Answer: 1

Q892: Pee hole optimization

1.Local optimization 2.Loop optimization 3.Constant folding 4.Data flow analysis

Answer: 3

Q893: Performance testing is only important for real-time or embedded systems.

1.true

2.false

3. 4.

Answer: 2

Q894: Physical layer provides

1.mechanical specifications of electrical connectors and cables

2.electrical specification of transmission line signal level

3.specification for IR over optical fiber

4.all of the mentioned

Answer: 4

Q895: Pick an incorrect declaration:

1. `int x[5];`
2. `int x[5]={1,2,3,4,5};`
3. `int x[5] = {1,2}`
4. `int x[];`

1.1

2.2

3.3

4.4

Answer: 3

Q896: Pick the odd one out.

1.[] 2.() 3.:: 4.~

Answer: 4

Q897: Polymorphism reduces the effort required to extend an object system by

- 1.Coupling objects together more tightly
- 2.enabling a number of different operations to share the same name.
- 3.making objects more dependent on one another
4. removing the barriers imposed by encapsulation.

Answer: 2

Q898: Popular application of flip-flop are.

- 1.Shift registers
- 2.Transfer register
- 3.Counters
- 4.All of these

Answer: 4

Q899: Postorder Tree traversal is recursive

- 1.LDR
- 2.LRD
- 3.DLR
- 4.DRL

Answer: 2

Q900: Predict the output of following C program

```
#include<stdio.h>
```

```
struct Point {  
  
int x, y, z; };  
  
int main() {  
  
struct Point p1 = {.y = 0, .z = 1, .x = 2};  
  
printf("%d %d %d", p1.x, p1.y, p1.z);  
  
return 0; }
```

1.Error

2.0 1 2

3.1 2 0

4.2 0 1

Answer: 4

Q901: PREDICT THE OUTPUT:

```
#include <stdio.h>  
  
void main()  
  
{  
  
int a=10,b=2,x=0;  
  
x=a+b*a+10/2*a;  
  
printf("value is =%d",x);  
  
}
```

1.Value is =1250 2.Value is =80

3.Value is =125

4.Error

Answer: 2

Q902: Prim's algorithm is a method available for finding out the minimum cost of a spanning tree.

Its time complexity is given by:

1.O(1) 2.O(n*n) 3.O(n logn) 4.O(n)

Answer: 3

Q903: Program flow graphs are identical to program flowcharts.

1.true

2.false

3. 4.

Answer: 2

Q904: PSW is saved in stack when there is a _____.

- 1.interrupt recognized
2. execution of RST instruction
3. Execution of CALL instruction
4. All of these

Answer: 1

Q905: Quantitative methods for assessing the quality of proposed architectural designs are readily available.

- 1.TRUE
- 2.FALSE
3. 4.

Answer: 2

Q906: Query Tree uses

- 1.Relational Algebra
- 2.Tuple Relational Calculus

3.Domain Relational Calculus

4.All of the options

Answer: 1

Q907: Relations produced from an E - R model will always be in

1.3 NF 2.B CNF 3.2 NF 4.1 NF

Answer: 4

Q908: Relocating bits used by relocating loader are specified by

1.Relocating loader itself 2.Linker 3.Assembler 4.Macro processor

Answer: 2

Q909: Replace the page that has not be used for the longest period of time. This principle is adopted by _____

1.FIFO Page replacement algorithm

2.Optimal Page replacement algorithm

3.Round robin scheduling algorithm

4.LRU Page replacement algoorithm

Answer: 4

Q910: Resource locking _____.

1.Allows multiple tasks to simultaneously use resource

2.Forces only one task to use any resource at any time

3.Can easily cause a dead lock condition

4.Is not used for disk drives

Answer: 2

Q911: Risk management is one of the most important jobs for a

1.Client

2.Investor

3. Production team

4. Project manager

Answer: 4

Q912: Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called

1. Static loading 2. Dynamic loading 3. Dynamic linking 4. Overlays

Answer: 3

Q913: Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called

1. Static loading

2. Dynamic loading

3. Dynamic linking

4. Overlays

Answer: 3

Q914: Run time polymorphism is achieved by _____

1.friend function 2.virtual function 3.operator overloading 4.function overloading

Answer: 2

Q915: $S \rightarrow aSa|bSb|a|b$; The language generated by the above grammar over the alphabet $\{a,b\}$ is the set of

1.All palindromes

2.All odd length palindromes.

3.Strings that begin and end with the same symbol

4.All even length palindromes

Answer: 2

Q916: Security testing attempts to verify that protection mechanisms built into a system protect it from improper penetration

- 1.true
- 2.false
- 3. 4.

Answer: 1

Q917: SELECT department_id, AVG(salary) FROM employees WHERE AVG(salary) > 8000
GROUP BY department_id

- 1.Displays the department ID along with the average salary of employees in each department if their average of salary is greater than 8000.
- 2.Displays a error
- 3.Displays the department ID along with the average salary of employees
- 4.None of the options

Answer: 2

Q918: SELECT department_id, COUNT(last_name) FROM employees;

- 1.Displays a error
- 2.Displays the department ID along with the number of employees in each department.

3. None of the options

4. Displays department ID and a null value

Answer: 2

Q919: SELECT employee_id, last_name FROM employees WHERE salary = (SELECT MIN(salary)
FROM employees GROUP BY department_id);

1. Displays the employee_id and name of employees who get minimum salary in their department

2. Error

3. None of the options

4. Displays the employee_id, name of employees and their salary

Answer: 1

Q920: SELECT last_name, SYSDATE-hire_date FROM employees;

1. Displays number of days an employee has worked in the company.

2. Displays number of months an employee has worked in the company.

3. Error

4. None of the mentioned

Answer: 1

Q921: Select operation in SQL is equivalent to

- 1.the selection operation in relational algebra
- 2.the selection operation in relational algebra, except that select in SQL retains duplicates
- 3.the projection operation in relational algebra
- 4.the projection operation in relational algebra, except that select in SQL retains duplicates

Answer: 4

Q922: Select the conflicting operation:

1. $r_1(x), w_2(y)$
2. $r_1(x), w_1(x)$
3. $w_1(y), w_2(x)$
4. $r_1(x), w_2(x)$

Answer: 3

Q923: SELECT THE HIGHEST PRIORITY OPERATOR

1.&& 2., 3.?: 4.++

Answer: 4

Q924: Shift reduce parsers are

1.Vertical parser 2.top down and bottom up parser 3.Bottom up parser 4.Top down parser

Answer: 3

Q925: Simple network management protocol (SNMP) is implemented with a daughter board in

1.the nodes 2.the server 3.the hubs 4.a separate PC that managers the network

Answer: 3

Q926: Skewed binary trees can be efficiently represented using

1.Arrays 2.Linked lists 3.Stacks 4.Queues

Answer: 2

Q927: Software coupling is a sign of poor architectural design and can always be avoided in every system.

- 1.True
- 2.False
- 3. 4.

Answer: 2

Q928: Software engineering includes system engineering.

- 1.True
- 2.False
- 3. 4.

Answer: 1

Q929: Software engineers collaborate with customers to define which of the following?

- 1.Customer visible usage scenarios
- 2.Important software features
- 3.System inputs and outputs 4.ALL

Answer: 4

Q930: Software is a product and can be manufactured using the same technologies used for other engineering artifacts.

- 1.True
- 2.False
- 3. 4.

Answer: 2. False

Q931: Software validation is achieved through a series of tests performed by the user once the software is deployed in his or her work environment.

- 1.true
- 2.false
- 3. 4.

Answer: 2. False

Q932: Some code optimizations are carried out on the intermediate code because

- 1.they enhance the portability of the compiler to other target processors
- 2.program analysis is more accurate on intermediate code than on machine code
- 3.the information from dataflow analysis cannot otherwise be used for optimization

4.the information from the front end cannot otherwise be used for optimization

Answer: 1. they enhance the portability of the compiler to other target processors

Q933: Some code optimizations are carried out on the intermediate code because

1.The information from data flow analysis cannot otherwise be used for optimization 2.They enhance the portability of the compiler to other target processors 3.The information from the front end cannot otherwise be used for optimization 4.Program analysis is more accurate on intermediate code than on machine code

Answer: 2. they enhance the portability of the compiler to other target processors

Q934: Specify the 2 library functions to dynamically allocate memory?

1.alloc() and memalloc() 2.malloc() and calloc() 3.memalloc() and faralloc() 4.malloc() and memalloc()

Answer: 2. malloc() and calloc()

Q935: Spurious tuples are formed because of

1.join operation done on a non-key attribute

2.outer join operation

3.transitive dependencies

4.inner join

Answer: 1. join operation done on a non key value

Q936: SRS is also known as specification of

1.White box testing

2.Stress testing

3.Integrated testing

4.Black box testing

Answer: 4. Black box testing

Q937: Station A needs to send a message consisting of 9 packets to Station B using a sliding window (window size 3) and go-back-n error control strategy. All packets are ready and immediately available for transmission. If every 5th packet that A transmits gets lost (but no acks from B ever get lost), then what is the number of packets that A will transmit for sending the message to B?

1.12

2.14

3.16

4.18

Answer: 2022-03-16 00:00:00

Q938: Station A uses 32 byte packets to transmit messages to Station B using a sliding window protocol. The round trip delay between A and B is 80 milliseconds and the bottleneck bandwidth on the path between A and B is 128 kbps. What is the optimal window size that A should use?

1.20

2.40

3.160

4.320

Answer: 2. 40

Q939: Stress testing examines the pressures placed on the user during system use in extreme environments

1.true

2.false

3. 4.

Answer: 2. false

Q940: String length is found by the condition

1.str[i]!=NULL 2.str[i]!=sizeof(str) 3.str[i]>='\0' 4.str[i]!='\0'

Answer: 4. str[i] != '\0'

Q941: Suppose a circular queue of capacity (n - 1) elements is implemented with an array of n elements. Assume that the insertion and deletion operation are carried out using REAR and FRONT as array index variables, respectively. Initially, REAR = FRONT = 0. The conditions to detect queue full and queue empty are

1.Full: (FRONT+1) mod n == REAR, empty: REAR == FRONT 2.Full: REAR == FRONT, empty: (REAR+1) mod n == FRONT 3.Full: (REAR+1) mod n == FRONT, empty: (FRONT+1) mod n == REAR 4.Full: (REAR+1) mod n == FRONT, empty: REAR == FRONT

Answer: 1. Full: (REAR+1) mod n == FRONT, empty: REAR == FRONT

Q942: Suppose a circular queue of capacity (n - 1) elements is implemented with an array of n elements. Assume that the insertion and deletion operation are carried out using REAR and FRONT

as array index variables, respectively. Initially, $REAR = FRONT = 0$. The conditions to detect queue full and queue empty are

- 1.Full: $(REAR+1) \bmod n == FRONT$, empty: $REAR == FRONT$
- 2.Full: $(REAR+1) \bmod n == FRONT$, empty: $(FRONT+1) \bmod n == REAR$
- 3.Full: $REAR == FRONT$, empty: $(REAR+1) \bmod n == FRONT$
- 4.Full: $(FRONT+1) \bmod n == REAR$, empty: $REAR == FRONT$

Answer: 1. Full: $(REAR+1) \bmod n == FRONT$, empty: $REAR == FRONT$

Q943: Suppose P, Q, R, S, T are sorted sequences having lengths 20, 24, 30, 35, 50 respectively. They are to be merged into a single sequence by merging together two sequences at a time, The number of comparisons that will be needed in the worst case by the optimal algorithm for doing this is _____

1.672 2.740 3.358 4.354

Answer: 3. 358

Q944: Suppose P, Q, R, S, T are sorted sequences having lengths 20,24,30,35,50 respectively. They are to be merged into a single sequence by merging together two sequences at a time. The number of comparisons that will be needed in the worst case by the optimal algorithm for doing this is _____

1.368 2.338 3.348 4.358

Answer: 3. 358

Q945: Suppose the round trip propagation delay for a 10 Mbps Ethernet having 48-bit jamming signal is 46.4 micro sec. The minimum frame size is:

1.94

2.416

3.464

4.512

Answer: 4. 512

Q946: Suppose x is dead, that is, never subsequently used, at the point where the statement $x=y+z$ appears in a basic block. Then this statement may be safely removed without changing the value of the basic block. This transformation is known as _____ .

- 1.Common subexpression elimination
- 2.Dead code elimination
- 3.Renaming temporary variables
- 4.Loop invariant

Answer: 2. dead code elimination

Q947: Suppose you want to delete the name that occurs before 'Vellore' in an alphabetical listing.

Which of the following data structures shall be most efficient for this operation?

1.Circular linked list 2.Dequeue 3.Linked list 4.Doubly linked list

Answer: 4. doubly linked list

Q948: Symantec Antivirus is a customized product.

1.True

2.False

3. 4.

Answer: 1. true

Q949: Synchronous counters eliminate the delay problems encountered with asynchronous (ripple) counters because the.

1.input clock pulses are applied simultaneously to each stage 2.input clock pulses are applied only to the first and last stages 3.input clock pulses are applied only to the last stage 4.input clock pulses are not used to activate any of the counter stages

Answer: 1. input clock pulses are applied simultaneously to each stage

Q950: Syntax for creating a RegExp object: (i). var txt=new RegExp(pattern,modifiers); (ii). var txt=/pattern/modifiers; Which of the above mentioned syntax is correct?

1.(i) only 2.(ii) only 3.Both (i) and (ii) 4.None of these

Answer: 3, both

Q951: Synthesized attribute can be easily simulated by a

1.LR grammar 2.Ambiguous grammar 3.LL grammar 4.LF grammar

Answer: 1. LR grammar

Q952: System prototypes allow users

1.to see how well the system supports their work

2.to start working on the system

3.to put the system to production

4.to program the software

Answer: 1

Q953: System reactions to external events is depicted by

- 1.State diagram
2. Activity diagram
- 3.Usecase diagram
4. Sequence diagram

Answer: 1. state diagram

Q954: Teams using agile software practices never create models.

- 1.TRUE
- 2.FALSE
3. 4.

Answer: 2. false

Q955: The focus of validation testing is to uncover places that a user will be able to observe failure of the software to conform to its requirements.

- 1.true
- 2.false

3. 4.

Answer: 1. true

Q956: The job of the requirements engineer is to categorize all stakeholder information in a way that allows decision makers to choose an internally consistent set of requirements.

1.True

2.False

3. 4.

Answer: 1. true

Q957: The -----is neither an input nor an output; it is an internal bit programmed via the PC4(Port A) or PC2(Port B)bits

1.IFB 2.INTR 3.INTE 4.NMI

Answer: 3. INTE

Q958: The instruction is used to specify the number of stop bits, data bits,parity bit, and baud rate clock factor for the 8251 UART

1.bit set/reset 2.Mode 3.Command 4.Code

Answer: Cant find

Q959: The 1 MB byte of memory can be divided into _____ segment

1.1 Kbyte

2.64 Kbyte

3.33 Kbyte

4.34 Kbyte

Answer: 2

Q960: The 16 bit flag of 8086 microprocessor is responsible to indicate _____

1.the condition of result of ALU operation

2.the condition of memory

3.the result of addition

4.the result of subtraction

Answer: 1

Q961: The 16-bit data segment value is 1000H and the offset is 2000H. calculated physical address is -----

1.10000H 2.11000H 3.12000H 4.12500H

Answer: 3

Q962: The 16-bit stack segment value is 5D27H and the offset is 2C30H. calculated physical address is -----

1.5FFEOH 2.5FAE0H 3.5FEA0H 4.12500H

Answer: 3

Q963: The ____ bus controller device decodes the signals to produce the control bus signal

1.internal

2.data

3.external

4.address

Answer: 3

Q964: The ____ translates internet domain and host names to IP address.

1.domain name system

2.routing information protocol

3.network time protocol

4.internet relay chat

Answer: 1

Q965: The _____ method of an Array object adds and/or removes elements from an array.

1.Slice

2.Reverse

3.Shift

4.Splice

Answer: 4

Q966: The _____ ensures that only one IC is active at a time to avoid a bus conflict caused by

two ICs writing different data to the same bus

1.control bus 2.control instructions 3.address decoder 4.CPU

Answer: 3

Q967: The _____ property specifies the stack order of an element

1.d-index 2.s-index 3.x-index 4.z-index

Answer: 4

Q968: The access method used for magnetic tape is_____

1.Direct

2.Random

3.Sequential

4.None of these

Answer: 3

Q969: The address resolution protocol (ARP) is used for:

1. Finding the IP address using DNS
2. Finding the IP address of the default gateway
3. Finding the IP address that corresponds to a MAC address
4. Finding the MAC address that corresponds to an IP address

Answer: 4

Q970: The advantage of DBMS over file systems is

1. redundancy
2. data dependence
3. multiple user
4. single user

Answer: 1

Q971: The architecture components for product engineering are

1.data, hardware, software, people

2.data, documentation, hardware, software

3. data, hardware, software, procedures

4.documentation, hardware, people, procedures

Answer: 1

Q972: The ASCII encoding of binary data is called

1.base 64 encoding

2.base 32 encoding

3.base 16 encoding

4.base 8 encoding

Answer: 1

Q973: The average time required to reach a storage location in memory and obtain its contents is called the

1.seek time

2.turnaround time

3.access time

4.transfer time

Answer: 3

Q974: The best index for exact match query is

1.Bucket Hash

2.Quad tree

3.B Tree

4.B+ Tree

Answer: 3

Q975: The best reason for using Independent software test teams is that

1.software developers do not need to do any testing

2.a test team will test the software more thoroughly

3.testers do not get involved with the project until testing begins

4.arguments between developers and testers are reduced

Answer: 2

Q976: The best way to conduct a requirements validation review is to

1.examine the system model for errors

2.have the customer look over the requirements

3.send them to the design team and see if they have any concerns

4.use a checklist of questions to examine each requirement

Answer: 1

Q977: The BIU contains FIFO register of size _____ bytes

1.8

2.6

3.4

4.12

Answer: 2

Q978: The BIU prefetches the instruction from memory and store them in _____

1.queue

2.register

3.memory

4.stack

Answer: 1

Q979: The call to the parameterized constructor of base class in the derived class

1.ppears inside the definition of the derived class constructor 2.appears in the member initialization list of the derived class constructor 3.appears inside the definition of the derived class 4.appears at the statement where the derived class object is created

Answer: 1

Q980: The call to the parameterized constructor of base class in the derived class

1. appears inside the definition of the derived class constructor 2. appears in the member initialization list of the derived class constructor 3. appears inside the definition of the derived class 4. appears at the statement where the derived class object is created

Answer: 1

Q981: The combination of Sixteen adjacent squares in four variable K-map represent the function equal to

1. Four literal 2. One literal 3. Unity 4. Zero

Answer: 1

Q982: The counters of 8253 can be operated in ----- modes of operation.

1. 4 2. 3 3. 6 4. 5

Answer: 3

Q983: The cyclomatic complexity metric provides the designer with information regarding the number of

1.cycles in the program

2.errors in the program

3. independent logic paths in the program

4.statements in the program

Answer: 4

Q984: The data structure required for Breadth First Traversal on a graph is

1.tree 2.array 3.stack 4.queue

Answer: 4

Q985: THE DATA TYPE IS ALL ABOUT

1.NAME VALUE ADDRESS 2.BITS BYTES WORD 3.SIZE LIMITS RESTRICTIONS 4.TYPE SIZE RANGE

Answer: 4

Q986: The decimal equivalent of hexadecimal number of 'A580' is

1.43286 2.42368 3.43288 4.48632

Answer: 2

Q987: The default copy constructor performs

1.Deep Copy 2.Shallow Copy 3.Soft Copy 4.Hard Copy

Answer: 2

Q988: The degree sequence of a simple graph is the sequence of the degrees of the nodes in the graph in decreasing order. Which of the following sequences can not be the degree sequence of any graph? I. 7, 6, 5, 4, 4, 3, 2, 1 II. 6, 6, 6, 6, 3, 3, 2, 2 III. 7, 6, 6, 4, 4, 3, 2, 2 IV. 8, 7, 7, 6, 4, 2, 1, 1

1.IV only 2.III and IV 3.I and II 4.II and IV

Answer: 4

Q989: The design process related to data structures and their representation is

1.Architectural design

2.Interface design

3.Component design

4.Database design

Answer: 2

Q990: The difference between linear array and a record is

1.A record form a hierarchical structure but a linear array does not 2.All of above 3.An array is suitable for homogeneous data but the data items in a record may have different data type 4.In a record, there may not be a natural ordering in opposed to linear array

Answer: 3

Q991: The Document object is which part of the object?

1.Tree 2.System 3.Window 4.Screen

Answer: 3

Q992: The efficient data structure to insert/delete a number in a stored set of numbers is

1.Queue 2.Linked list 3.Doubly linked list 4.Binary tree

Answer: 3

Q993: The entity relationship diagram

1.depicts relationships between data objects

2.depicts functions that transform the data flow

3.indicates how data are transformed by the system

4.indicates system reactions to external events

Answer: 1

Q994: The ESC instruction of 8086 may have two formats. In one of the formats, no memory operand is used. Under this format, the number of external op-codes (for the co- processor) which can be specified is

1.64 2.128 3.256 4.512

Answer: 1

Q995: The external system bus architecture is created using from _____ architecture

1.Pascal

2.Dennis Ritchie

3.Charles Babbage

4.Von Neumann

Answer: 1

Q996: The file transfer protocol is built on

1.data centric architecture

2.service oriented architecture

3.client server architecture

4.peer to peer architecture

Answer: 3

Q997: The first collision free protocol is

1.Binary countdown

2.Basic bitmap

3.Reservation protocol

4.SAP

Answer: 2

Q998: The first processor to include Virtual memory in the Intel microprocessor family was

1.Pentium 2.80486 3.80286 4.80386

Answer: 3

Q999: The following is not a Relational Model Constraint

1.Referential Integrity Constraint 2.Check Constraint 3.Foreign Key Constraint 4.Entity Integrity
Constraint

Answer: 2

Q1000: The following SQL is which type of join: SELECT CUSTOMER_T. CUSTOMER_ID,

ORDER_T. CUSTOMER_ID, NAME, ORDER_ID FROM CUSTOMER_T,ORDER_T ;

1.Equi-join

2.Natural join

3.Outer join

4.Cartesian join

Answer: 4

Q1001: The formal methods model of software development makes use of mathematical methods to

1.

Define the specification for computer-based system

2.Develop defect free computer-based systems

3.Verify the correctness of computer-based systems

4.ALL

Answer: 4

Q1002: The function used to remove the leading spaces is

1.ltrim

2.lpad

3.rpad

4.rtrim

Answer: 1

Q1003: The goal of product engineering is to translate the customer's desire for a set of defined capabilities into a working product.

1.TRUE

2.FALSE

3. 4.

Answer: 1

Q1004: The grammar $A \rightarrow AA \mid (A) \mid \epsilon$ is not suitable for predictive-parsing because the grammar is

1.ambiguous

2.left-recursive

3.right-recursive

4.an operator-grammar

Answer: nan

Q1005: The grammar $S \rightarrow aSa \mid bS \mid c$ is

1.LL(1) but not LR(1)

2.LR(1)but not LR(1)

3.Both LL(1)and LR(1)

4.Neither LL(1)nor LR(1)

Answer: 3

Q1006: The Hardware mechanism that enables a device to notify the CPU is called _____.

1.Polling

2.Interrupt

3.Systems Call

4.None of these

Answer: 2

Q1007: The high paging activity is called _____

1.Inter process communication

2.Thrashing

3.Context Switching

4.Working Set

Answer: 2

Q1008: The IC 8237 is a

1.DMA Controller

2.Interrupt Controller

3.Keyboard controller

4.Serial Interface Controller

Answer: 1

Q1009: The IC 8251 A has -----many pins

1.24

2.28

3.40

4.30

Answer: 2

Q1010: The IC 8254 has -----many pins

1.24

2.28

3.34

4.40

Answer: 1

Q1011: The IC 8254 has -----many 16 bit counters

1.1

2.2

3.3

4.4

Answer: 3

Q1012: The IC 8279 has -----many pins

1.20

2.30

3.40

4.10

Answer: 3

Q1013: The IC Number for USART is -----

1.IC 8251A

2.IC8259

3.IC5255

4.IC 8254

Answer: 1

Q1014: The idea of cache memory is based

1.on the property of locality of reference

2. on the heuristic 90-10 rule

3. on the fact that references generally tend to cluster

4.all of these

Answer: 1

Q1015: The importance of software design can be summarized in a single word

1.accuracy

2.complexity

3. efficiency

4. quality

Answer: 4

Q1016: The Incremental Model is a result of combination of elements of which two models?

1.Build & FIX Model & Waterfall Model

2. Linear Model & RAD Model

3.Linear Model & Prototyping Model

4.Waterfall Model & RAD Model

Answer: 3

Q1017: The incremental model of software development is

- 1.A reasonable approach when requirements are well defined.
- 2.A good approach when a working core product is required quickly.
- 3.The best approach to use for projects with large development teams.
- 4.A revolutionary model that is not used for commercial products.

Answer: 2

Q1018: The intel 8086 microprocessor is a _____ processor

1.8 bit

2.16 bit

3.32 bit

4.4bit

Answer: 2

Q1019: The internal block diagram of 80286 contains ---- functional parts.

1.6 2.4 3.2 4.8

Answer: 2

Q1020: The interrupt cycle ends when the instruction is executed

1.IRET 2.CALL 3.PUSH 4.POP

Answer: nan

Q1021: The intersection of CFL and regular language

1.Is always regular and context free

2.Is always regular

3.Is always context free

4.Need not be regular

Answer: 3

Q1022: The IP is _____ bits in length

1.8 bits

2.4 bits

3.16 bits

4.32 bits

Answer: 32 bits

Q1023: The javascript statement `a===b` refers to

1.Both a and b are equal in value, type and reference address

2.Both a and b are equal in value

3.Both a and b are equal in value and type

4. There is no such statement

Answer: Both a and b are equal in value and type

Q1024: The kernel keeps track of the state of each task by using a data structure called ____

1. Process control block

2. Process Status Word

3. Memory control block

4. None of these

Answer: Process Control Block

Q1025: The language accepted by a Pushdown Automation in which the stack is limited to 10 items is best described as

1. Regular

2. context free

3. Recursive

4. Deterministic context free

Answer: Regular

Q1026: The language $L = \{0^i 2^1 i \mid i \geq 0\}$ over the alphabet $\{0, 1, 2\}$ is:

1. not recursive
2. is recursive and is a deterministic CFL
3. is a regular language
4. is not a deterministic CFL but a CFL

Answer: Is recursive and is a deterministic CFL

Q1027: The language that the computer can understand and execute is called _____

1. Machine language
2. Application software
3. System program
4. None of these

Answer: Machine Language

Q1028: The language $\{a^m b^n C^{m+n} \mid m, n \geq 1\}$ is

- 1.Regular language
- 2.context free but not regular
- 3.context sensitive but not context free
- 4.type-0 but not context sensitive

Answer: Context free but not regular

Q1029: The length of the shortest string NOT in the language (over $S = \{a, b\}$) of the following regular expression is _____.

$a^*b^*(ba)^*a^*$

- 1.2
- 2.3
- 3.4
- 4.5

Answer: 3

Q1030: The length property belongs to which of the following objects?

- 1.Window
- 2.Element
- 3.History
- 4.Document

Answer: History

Q1031: The levels of hierarchy in inheritance helps to handle

1.flexibility 2.complexity 3.detailed information 4.security

Answer: Complexity

Q1032: The lexical analysis for a modern language such as Java needs the power of which one of the following machine models in a necessary and sufficient sense?

1.Deterministic pushdown automata

2.Finite state automata

3.Non-deterministic pushdown automata

4.Turing machine

Answer: Finite State Automata

Q1033: The library function used to find the last occurrence of a character in a string is

1.strnstr() 2.laststr() 3.strchr() 4.strstr()

Answer: strchr()

Q1034: The linear sequential model of software development is

- 1.A reasonable approach when requirements are well defined.
- 2.A good approach when a working program is required quickly.
- 3.The best approach to use for projects with large development teams.
- 4.An old fashioned model that cannot be used in a modern context.

Answer: A reasonable approach when requirements are well defined

Q1035: The linear sequential model of software development is also known as the

- 1.Classical life cycle model
- 2.Spiral model
- 3.Waterfall model
- 4.Incremental Model

Answer: Waterfall model

Q1036: The load instruction is mostly used to designate a transfer from memory to a processor

register known as_____.

1.Accumulator

2. Instruction Register

3. Program counter

4.Memory address Register

Answer: Accumulator

Q1037: The main purpose of a data link content monitor is to

1.detect problems in protocols 2.determine the type of switch used in a data link 3.determine the flow of data 4.determine the type of switching used in data link

Answer: To detect problems in protocols

Q1038: The maximum number of superkeys for the relation schema $R(E,F,G,H)$ with E as the key is

1.7

2.8

3.9

4.6

Answer: 8

Q1039: The maximum size of payload field in ethernet frame is

1.1000 bytes

2.1200 bytes

3.1300 bytes

4.1500 bytes

Answer: 1500 bytes

Q1040: The maximum window size for data transmission using the selective reject protocol with n-bit frame sequence numbers is:

1. 2^n

2. $2^{(n-1)}$

3. $2^n - 1$

4. $2^{(n-2)}$

Answer: $2^{(n-1)}$

Q1041: The MC 1488 is

1. TTL to RS 232C Level converter
2. RS-232 to TTL level converter
3. Bidirectional Level converter
4. Unidirectional level converter

Answer: TTL to RS 232C Level converter

Q1042: The mechanism that bring a page into memory only when it is needed is called _____

1. Segmentation
2. Fragmentation
3. Demand Paging
4. Page Replacement

Answer: Demand Paging

Q1043: The members of a class, by default, are

1.private 2.protected 3.public 4.mandatory to specify

Answer: Private

Q1044: The memory unit that communicates directly with the CPU is called the

1.main memory

2.Secondary memory

3. shared memory

4.auxiliary memory

Answer: Main Memory

Q1045: The microprocessor can read/write 16 bit data from or to _____

1.memory

2.I /O device

3.processor

4.register

Answer: Memory

Q1046: The microprocessor determines whether the specified condition exists or not by testing the _____

1.carry flag

2.conditional flag

3.common flag

4.sign flag

Answer: Conditional Flag

Q1047: The minimum number of arithmetic operations required to evaluate the polynomial $P(X) = X^5 + 4X^3 + 6X + 5$ for a given value of X using only one temporary variable is.

1.6 2.9 3.8 4.7

Answer: 7

Q1048: The minimum number of arithmetic operations required to evaluate the polynomial $P(X)=X^5+4X^3+6X+5$ for a given value of X using only one temporary variable.

1.6 2.7 3.8 4.9

Answer: 7

Q1049: The minimum number of nodes in a binary tree of depth d (root at level 0) is

1. $2d - 1$ 2. $d + 1$ 3. $2d + 1 - 1$ 4. d

Answer: $d+1$

Q1050: The MMU (Memory Management Unit) is a

1. Hardware
2. Software
3. Firmware
4. Malware

Answer: Hardware

Q1051: The nature of collaboration is such that all system requirements are defined by consensus of a committee of customers and developers.

- 1.TRUE
- 2.FALSE
- 3. 4.

Answer: False

Q1052: The node type for document returns the value ---.

1.2 2.9 3.3 4.8

Answer: 9

Q1053: The number of auxiliary memory required for a Push Down Machine (PDM) to behave like a Finite State Machine (FSM) is

- 1.0
- 2.2
- 3.4
- 4.1

Answer: False

Q1054: The number of clock pulses needed to shift one byte of data from input to the output of a 4-bit shift register is.

1.10 2.12 3.16 4.32

Answer: 16

Q1055: The number of components in a graph with n nodes and 1 edge are

1. n 2. $n-2$ 3. $n-1$ 4. $n-3$

Answer: $n-1$

Q1056: The number of components in a graph with n nodes and 1 edge are

1. n 2. $n-2$ 3. $n-1$ 4. $n-3$

Answer: $n-1$

Q1057: The number of counters available in internal block diagram of 8253 is

1.2 2.1 3.3 4.4

Answer: 3

Q1058: The number of states in DFA is -----than the number of states in NFA for the same

Language.

1.Greater

2.less

3.greater equal

4.equal

Answer: Greater

Q1059: The number of tokens in the following C statement is

```
printf("i = %d, &i = %x", i, &i);
```

1.3

2.10

3.26

4.21

Answer: 10

Q1060: The operation of processing each element in the list is known as

1.Sorting 2.Merging 3.Inserting 4.Traversal

Answer: Traversal

Q1061: The other name for MODE 0 in 8253 timer is

1.software triggered strobe 2.Programmable one shot 3.Interrupt on terminal count 4.Square wave rate generator

Answer: Interrupt on Terminal Count

Q1062: The physical layer concerns with

1.bit-by-bit delivery

2.process to process delivery

3.application to application delivery

4.Hop by hop delivery

Answer: bit-by-bit delivery

Q1063: The physical layer is responsible for

1.line coding

2.channel coding

3.modulation

4.all of the mentioned

Answer: All of the mentioned

Q1064: The physical layer translates logical communication requests from the _____ into hardware specific operations.

1.data link layer

2.network layer

3.trasnport layer

4.application layer

Answer: Data Link Layer

Q1065: The pop() method of the array in javascript does which of the following task ?

1.decrements the total length by 1

2.increments the total length by 1

3.prints the first element but no effect on the length

4.don't return the value of deleted element

Answer: Decrements the total length by 1

Q1066: The portion of physical layer that interfaces with the media access control sublayer is called

1.physical signalling sublayer

2.physical data sublayer

3.physical address sublayer

4.none of the mentioned

Answer: Physical Signalling Sublayer

Q1067: The postfix expression for $* + a b - c d$ is?

1.ab + cd - * 2.ab + cd * - 3.ab + - cd * 4.ab cd + - *

Answer: ab + cd - *

Q1068: The postfix form of the expression $(A + B) * (C * D - E) * F / G$ is

1.AB + CD* E - *F *G / 2.AB + CD* E - F **G / 3.AB+ CD*E - FG /** 4.AB + CDE * - * F *G /

Answer: AB+ CD*E - FG /**

Q1069: The preorder traversal sequence of a binary search tree is 30,20,10,15,25,23,39,35,42.

Which one of the following is the postorder traversal sequence of the same tree?

1.10,20,15,23,25,35,42,39,30 2.15,10,25,23,20,42,35,39,30 3.15,20,10,23,25,42,35,39,30
4.15,10,23,25,20,35,42,39,30

Answer: 15,10,23,25,20,35,42,39,30

Q1070: The process of retaining data for future use is called

1.reading

2.writing

3.storing

4.coding

Answer: Storing

Q1071: The processes that keep track of all mobile hosts visiting the area is

1.Home agent

2.Mobile agent

3.Foreign agent

4.User agent

Answer: Foreign Agent

Q1072: The project planner examines the statement of scope and extracts all important software functions which is known as

1.Association

2.Decomposition

3.Planning process

4.ALL

Answer: Decomposition

Q1073: The rapid application development model is

- 1.Another name for component-based development.
- 2.Another name for component-based development.
- 3.A high speed adaptation of the linear sequential model.

4.ALL

Answer: A high speed adaptation of the linear sequential model.

Q1074: The RDBMS terminology for a row is

- 1.attribute
- 2.relation
- 3.degree
- 4.tuple

Answer: Tuple

Q1075: The recognizing capabilities of NDFSM and DFSM

1.may be different

2.must be different

3.must be same

4.none of the mentioned

Answer: Must be same

Q1076: The relational model uses some unfamiliar terminology. A tuple is equivalence to a:

1.record 2.field 3.file 4.database

Answer: Record

Q1077: The removal of process from active contention of CPU and reintroduce them into memory later is known as _____

1.Interrupt

2.Swapping

3.Signal

4.Thread

Answer: Swapping

Q1078: The restriction while using the binary search is ?

1.List should be small in number 2.List should be large in number 3.List should be sorted 4.No restriction

Answer: List should be sorted

Q1079: The result evaluating the postfix expression (10 5 + 60 6 / * 8 -) is

1.284 2.142 3.213 4.71

Answer: 142

Q1080: The searching technique that takes $O(1)$ time to find a data is

1.Binary Search 2.Linear Search 3.Tree Search 4.Hashing

Answer: 4.Hashing

Q1081: The segment number S is legal if

1. $S < STBR$

2. $S > STBR$

3. $S < STLR$

4. $S > STLR$

Answer: 3. $S < STLR$

Q1082: The simplest image processing technique is

1.coordinates transformation 2.intensity transformation 3.spatial transformation 4.domain transformation

Answer: 3.spatial transformation

Q1083: The situation when in a linked list $START=NULL$ is

1.overflow 2.underflow 3.housefull 4.saturated

Answer: 2.underflow

Q1084: The smallest element of an array's index is called its

1.lower bound 2.range

D. extract 3.upper bound 4.ion

Answer: 1.lower bound

Q1085: The smallest finite automation which accepts the language $\{x \mid \text{length of } x \text{ is divisible by } 3\}$ has :

1.2 states

2.3 states

3.4 states

4.5 states

Answer: 2.3 states

Q1086: The space factor when determining the efficiency of algorithm is measured by

1.Counting the average memory needed by the algorithm 2.Counting the minimum memory needed

by the algorithm 3.Counting the maximum memory needed by the algorithm 4.Counting the maximum disk space needed by the algorithm

Answer: 3.Counting the maximum memory needed by the algorithm

Q1087: The spiral model of software development

1.Ends with the delivery of the software product

2.

Is not more chaotic than the incremental model

3.Do not Include project risks evaluation during each iteration 4.Includes feasibility risks

Answer: 3.Do not Include project risks evaluation during each iteration

Q1088: The spiral model was originally proposed by

1.IBM

2.Barry Boehm

3. Pressman

4.Royce

Answer: 2.Barry Boehm

Q1089: The SQL BETWEEN operator

1.Specifies a range to test

2.specifies between which tables the data is present

3.specifies the columns between which columns the data is present

4.None of the options

Answer: 1.Specifies a range to test

Q1090: The starting address for counter 0 of 8253 is 0038H, then port address for control word register is

1.44H 2.49H 3.42H 4.46H

Answer: nan

Q1091: The state diagram

1.depicts relationships between data objects

2.depicts functions that transform the data flow

3.indicates how data are transformed by the system

4.indicates system reactions to external events

Answer: 1.depicts relationships between data objects

Q1092: The status that cannot be operated by direct instructions is

1.Z 2.Cy 3.P 4.AC

Answer: 4.AC

Q1093: The stream insertion operator should be overloaded as

1.friend functions 2.member function 3.non member functions 4.static functions

Answer: 1.friend functions

Q1094: The stream insertion operator should be overloaded as

1.friend functions 2.member function 3.non member functions 4.static functions

Answer: 1.friend functions

Q1095: The switching method fixes the path from source to destination is _____

1.circuit switching 2.Message Switching 3.Packet switching 4.Frame Relay

Answer: 1.circuit switching

Q1096: The syntax of Eval is _____

1.[objectName.]eval(numeriC) 2.[objectName.]eval(string) 3.[EvalName.]eval(string)

4.[EvalName.]eval(numeriC)

Answer: 2.[objectName.]eval(string)

Q1097: The system engineering process usually begins with the

1.detailed view

2.domain view

3.element view

4.world view

Answer: 4.world view

Q1098: The system specification describes the

1.Function, performance and constraints of a computer-based system

2. implementation of each allocated system

3.element software architecture

4.time required for system simulation

Answer: 1.Function, performance and constraints of a computer-based system

Q1099: The throughput of the IEEE standard 802.11b is _____

1.<=11Mbps

2.<=64Mbps

3.<=74Mbps

4.None of the mentioned

Answer: 1.<=11Mbps

Q1100: The tightest upper bound for the worst case performance of quicksort implemented on an array of n elements by always choosing the pivot as the central element is

1. $T(n! \log n)$ 2. $O(n \log n)$ 3. $O(n^2)$ 4. $O(n^3)$

Answer: 3. $O(n^2)$

Q1101: The time complexity to build a heap with a list of n numbers is

1. $O(n \log n)$ 2. $O(n)$ 3. $O(\log n)$ 4. $O(n^2)$

Answer: 1. $O(n \log n)$

Q1102: The topology with highest reliability is

1. ring topology 2. star topology 3. bus topology 4. mesh topology

Answer: 4. mesh topology

Q1103: The total number of pins for the IC 8255 is

1. 28

2. 40

3. 30

4.20

Answer: 2. 40

Q1104: The two statements that can be used to change the flow of control are

1.switch and do-while 2.if and while 3.if and switch 4.break and continue

Answer: 3.if and switch

Q1105: The UNION SQL clause can be used with...

1.none of the options

2.the SELECT clause only

3.the UPDATE clause only

4.the DELETE and UPDATE clauses

Answer: 2.the SELECT clause only

Q1106: The use of traceability tables helps to

1.debug programs following the detection of run-time errors

2.determine the performance of algorithm implementations

3.identify, control, and track requirements changes

4.Analyze design changes

Answer: 3.identify, control, and track requirements changes

Q1107: The value in AL=11011010 after the operation of CBW, the result is

1.AX=1101 1010 1111 1111 2.AX=1101 1010 0000 0000

. 3.AX=1111 1111 1101 1010 4.AX=0000 0000 1101 1010

Answer: nan

Q1108: The virtual file system provides us the following

1.Object oriented file implementation

2.Structured programming file implementation

3.Linked file allocation

4.Indexed file allocation

Answer: 2.Structured programming file implementation

Q1109: The work of EU is _____

1.encoding

2.decoding

3.processing

4.calculations

Answer: 2.decoding

Q1110: The work products produced during requirement elicitation will vary depending on the

1. size of the budget

2.size of the product being built

3.software process being used

4.stakeholders needs

Answer: 2.size of the product being built

Q1111: The worst case running time to search for an element in a balanced binary search tree with $n \cdot 2^n$ elements is

1. $\theta(n \log n)$ 2. $\theta(n \cdot 2^n)$ 3. $\theta(n)$ 4. $\theta(\log n)$

Answer: 3. $\theta(n)$

Q1112: The worst case running time to search for an element in a balanced in a binary search tree with $n \cdot 2^n$ elements is

1. $\theta(n \log n)$ 2. $\theta(n \cdot 2^n)$ 3. $\theta(n)$ 4. $\theta(\log n)$

Answer: 3. $\theta(n)$

Q1113: There are n stations in a slotted LAN. Each station attempts to transmit with a probability p in each time slot. What is the probability that only one station transmits in a given time slot?

1. $(1-p)^{(n-1)}$

2. $np(1-p)^{(n-1)}$

3. $p(1-p)^{(n-1)}$

4. $1-(1-p)^{(n-1)}$

Answer: $2 \cdot np(1-p)^{(n-1)}$

Q1114: There is no connection setup phase in _____

1.Frame relay 2.Virtual Circuit Switching 3.Datagram 4.ATM

Answer: 3.Datagram

Q1115: Thrashing occurs _____

1.when excessive swapping takes place

2.when you thrash your computer

3.whenever deadlock occurs

4.when no swapping takes place

Answer: 1.when excessive swapping takes place

Q1116: Thresholding function in contrast stretching creates

1.binary image 2.high quality image 3.low quality image 4.enhanced image

Answer: 1.binary image

Q1117: To create an alias Objects have to be passed by

1.address 2.reference 3.value 4.field by field

Answer: 2.reference

Q1118: To Delete an item from a Queue identify the correct set of statements

1.Q[REAR] = item; REAR ++ 2.item = Q[FRONT]; FRONT++ 3.item = Q[REAR]; FRONT ++ 4.item = Q[FRONT]; REAR ++

Answer: 2.item = Q[FRONT]; FRONT++

Q1119: To determine the architectural style or combination of styles that best fits the proposed system, requirements engineering is used to uncover

1.algorithmic complexity

2.characteristics and constraints

3.control and data

4.design patterns

Answer: 2.characteristics and constraints

Q1120: To interface memory with the microprocessor, connect register the lines of the address bus must be added to address lines of the _____ chip.

1.single

2.memory

3.multiple

4.triple

Answer: 2.memory

Q1121: To operate correctly, starting a ring counter requires

1.presetting all the flip-flops 2.clearing one flip-flop and presetting all the others 3.presetting one flip-flop and clearing all the others 4.clearing all the flip-flops

Answer: 3.presetting one flip-flop and clearing all the others

Q1122: Today the increased power of the personal computer has brought about an abandonment of the practice of team development of software

1.True

2.false

3. 4.

Answer: 2. false

Q1123: Trigger is a

1.Statement that enables to start any DBMS 2.Statement that is executed by the user when debugging an application program 3.Statement that is executed automatically by the system as a side effect of a modification to the database 4.Condition the system tests for the validity of the database user

Answer: 3.Statement that is executed automatically by the system as a side effect of a modification to the database

Q1124: Two computers C1 and C2 are configured as follows. C1 have IP address as 203.197.2.53 and netmask 255.255.128.0. C2 have IP address as 203.197.75.201 and netmask 255.255.192.0. Which one of the following statements is true?

1.C1 and C2 both assume they are on the same network

2.C2 assumes C1 is on same network, but C1 assumes C2 is on a different network

3.C1 assumes C2 is on same network, but C2 assumes C1 is on a different network

4.C1 and C2 both assume they are on different networks.

Answer: 3.C1 assumes C2 is on same network, but C2 assumes C1 is on a different network

Q1125: Two sets of functional dependencies E and F are equivalent if $E^+ = F^+$.This statement is

1.True

2.False

3.Cant Say

4.

Answer: 1.True

Q1126: Updating a database means

1.deleting database 2.modifying or adding record occurrences 3.revising the file structure

4.reorganizing the database

Answer: 2.modifying or adding record occurrences

Q1127: Usability questionnaires are most meaningful to the interface designers when completed by

1.customers

2. experienced programmers

3.product users

4.project managers

Answer: 3.product users

Q1128: Using linked list node representation, inserting a node in general tree is performed efficiently

1.not possible 2.by merging with an existing node 3.after introducing a new link 4.after converting to binary tree

Answer: 4.after converting to binary tree

Q1129: Using the 8259A, the INT input of the 8086 can be expanded to accommodate up to

----- prioritized interrupt inputs

1.60 2.64 3.16 4.32

Answer: 2. 64

Q1130: Usually a pure virtual function

1. Will be called only to delete an object
2. Is defined only in derived class
3. Will never be called
4. Has complete function body

Answer: 2. Is defined only in derived class

Q1131: Virtual memory is the portion of _____.

1. RAM
2. Cache Memory
3. Hard Disc
4. None of these

Answer: 3. Hard Disc

Q1132: Voice privacy in GSM cellular telephone protocol is provided by

1. A5/2 cipher
2. b5/4 cipher

3.b5/6 cipher

4.b5/8 cipher

Answer: 1.A5/2 cipher

Q1133: VOLATILE MEMORY IS _____ ?

1.COMPACT DISK 2.HARD DISK 3.RANDOM ACCESS MEMORY 4.READ ONLY MEMORY

Answer: 3.RANDOM ACCESS MEMORY

Q1134: What are the three Analysis models that depict software?

1.architecture, interface, component

2.cost, risk, schedule

3.Information, function, behavior

4.NONE

Answer: 3.Information, function, behavior

Q1135: What assess the risk and your plans for risk mitigation and revise these when you learn more about the risk?

1.Risk monitoring

2.Risk planning

3.Risk analysis

4.Risk identification

Answer: 1

Q1136: What characteristic of RAM memory makes it not suitable for permanent storage?

1.too slow

2. unreliable

3.it is volatile

4.too bulky

Answer: 3

Q1137: What do the 'c' and 'v' in argv stands for?

1.'c' means argument count 'v' means argument vector 2.'c' means argument count 'v' means argument vertex 3.'c' means argument configuration 'v' means argument visibility 4.'c' means argument control 'v' means argument vector

Answer: 1

Q1138: What does /^[^]* regular expression indicate ?

1.Match one or more characters that are not open parenthesis 2.Match zero or more characters that are open parenthesis 3.Match zero or more characters that are not open parenthesis 4.Match one or more characters that are open parenthesis

Answer: 3

Q1139: What does explode function in php do

1.Used to convert a string to an array 2.Used to split a given string into the number of chunks specified 3.Used to split a string by a string 4.Used to split string into two equal halves

Answer: 1

Q1140: What does microprocessor speed depends on

1.Clock 2.Address bus width 3.Data bus width 4.Size of register

Answer: 3

Q1141: What does parseFloat(9+10) evaluates to in JavaScript?

1.19 2.910 3.9109 4.91

Answer: 1

Q1142: What does the following declaration mean?

```
int (*ptr)[10];
```

1.ptr is array of pointers to 10 integers 2.ptr is a pointer to an array of 10 integers 3.ptr is an array of 10 integers 4.ptr is an pointer to array

Answer: 2

Q1143: What elements will the following script output?

```
<?php
```

```
$array = array (true => 'a', 1 => 'b');
```

```
var_dump ($array);
```

```
?>
```


1.1 => 'b'

2.True => 'a', a => 'b'

3.NULL

4.0 => 'a', 1 => 'b'

Answer: 3

Q1144: What gets printed? \$str = 'a\\b\\n'; echo \$str;

1.ab(newline) 2.a\\b(newline) 3.a\\b\\n 4.a\\b(newline)

Answer: 3

Q1145: What happens if no file path is given in include() function?

1.PHP continues to execute the script. 2.Results in a fatal error 3.Include_path is made use of 4.It haults the script.

Answer: 3

Q1146: What is a Software ?

1.Software is set of programs

2. Software is documentation and configuration of data

3. Software is set of programs and Software is documentation and configuration of data

4. Software is a set of documents.

Answer: 3

Q1147: What is asynchronous counter.

1. none of them 2. A master clock triggers all the flip-flops at a time 3. all the flip-flops are combined to common clock 4. each flip-flop has its own clock

Answer: 4

Q1148: What is data encryption standard (DES)?

1. block cipher

2. stream cipher

3. bit cipher

4. none of the mentioned

Answer: 1

Q1149: What is interframe gap?

- 1.idle time between frames
- 2.idle time between frame bits
- 3.idle time between packets
- 4.none of the mentioned

Answer: 1

Q1150: What is meant by parallel-loading the register?

- 1.Shifting the data in all flip-flops simultaneously
- 2.Loading data in two of the flip-flops
- 3.Loading data in all flip-flops at the same time
- 4.Momentarily disabling the synchronous SET and RESET inputs

Answer: 3

Q1151: What is the best case for linear search

1.O(n) 2.O(1) 3.O(log n) 4.O(2n)

Answer: 2

Q1152: What is the code to start displaying the time when document loads?

1.onload = displayTime; 2.window. = displayTime; 3.window.onload = displayTime; 4.window.onload = start;

Answer: 3

Q1153: What is the condition for resetting(s=0) the S flag in status register?

1.MSB of the result is One 2.MSB of the result is zero 3.LSB of the result is one 4.LSB of the result is zero

Answer: 2

Q1154: What is the correct CSS syntax for making all the elements bold?

1.p {font-weight:bold;} 2.p style="text-size:bold" 3.p {text-size:bold} 4.p style="font-size:bold">

Answer: 1

Q1155: What is the correct way to connect to a MySQL database?

1.mysql_db(host,username,password,dbname);

2.mysql_connect(host,username,password,dbname);

3.mysql_open(host,username,password,dbname);

4.mysql_connect(,,)

Answer: 2

Q1156: What is the data structures used to perform recursion?

1.list 2.queue 3.stack 4.Tree

Answer: 3

Q1157: What is the default execution time set in set_time_limit()?

1.20 secs 2.30 secs 3.40 secs 4.50 secs

Answer: 2

Q1158: What is the default size of a file set in upload_max_filesize ?

1.1 MB 2.2 MB 3.2.5 MB 4.3 MB

Answer: 2

Q1159: What is the difference between echo and print?

1.They both behave the same. 2.Print can take multiple parameters where as echo cannot 3.Echo can take multiple parameters where as print cannot 4.Print is a function where as echo is not.

Answer: 3

Q1160: What is the following style an example of? `img[alt~="Pie"]`

1.Attribute Match 2.Exact Value Match 3.Contains Value Match 4.Subcode Match

Answer: 3

Q1161: What is the highest normal form level satisfied by the following table design?

$R = \{A1, A2, A3, A4, A4\}$ $F = \{A1 \rightarrow A3, A3 \rightarrow A4\}$ $Key = \{A1, A2\}$

1.1 NF

2.2 NF

3.3 NF

4.BCNF

Answer: 2

Q1162: What is the maximum number of reduce moves that can be taken by a bottom-up parser for a grammar with no epsilon- and unit-production (i.e., of type $A \rightarrow \epsilon$ and $A \rightarrow a$) to parse a string with n tokens?

1. $n/2$

2. $n-1$

3. $2n-1$

4. 2^n

Answer: 2

Q1163: What is the maximum size of data that the application layer can pass on to the TCP layer below?

1. Any size

2. 2^{16} bytes-size of TCP header

3. 2^{16} bytes

4.1500 bytes

Answer: 1

Q1164: What is the minimum number of NAND gates required to implement $A + AB' + AB'C$?

1.0 2.1 3.2 4.3

Answer: 1

Q1165: What is the most essential purpose of paranthesis in regular expressions?

1. Define pattern matching techniques 2. Define subpatterns within the complete pattern 3. Define portion of strings in the regular expression 4. All of the mentioned

Answer: 2

Q1166: what is the need of segmenting the memory in 8086

1. Increase the memory accessibility 2. Increase the memory addressability 3. easy to retrieve data 4. faster access

Answer: 2

Q1167: What is the normal order of activities in which traditional software testing is organized? a. integration testing b. system testing c. unit testing d.validation testing

1.a, d, c, b

2.b, d, a, c

3.c, a, d, b

4. d, b, c, a

Answer: 3

Q1168: What is the order of the stages in the waterfall mode?

1.Requirements Definition, System & Software Design, Implementation & Unit Testing, Integration & System Testing, Operation & Maintenance.

2.Requirements Definition, Integration & System Testing, System & Software Design, Implementation & Unit Testing, Operation & Maintenance.

3.System & Software Design, Requirements Definition, Operation & Maintenance, Implementation & Unit Testing, Integration & System Testing.

4.Implementation & Unit Testing, Requirements Definition, System & Software Design, Integration & System Testing, Operation & Maintenance.

Answer: 1

Q1169: what is the output for the following function? LPAD(salary,10,'')

1.10***24000

2.*****24000

3.24000*****

4.error

Answer: 2

Q1170: What is the output of C program with structures.?

```
int main()
{
    structure hotel
    {
        int items;
        char name[10]; }a;
    strcpy(a.name, "TAJ");
    a.items=10;
    printf("%s", a.name);
    return 0;}
```

1.empty string

2.TAJ

3.none

4.Error

Answer: 4

Q1171: What is the output of the following program ?

```
main (){  
    int x = 2, y = 5;  
    if(x < y) return (x = x + y);  
    else printf ("z1");  
    printf("z2");  
}
```

1.z1z2

2.z1

3.Compilation error

4.none

Answer: 4

Q1172: What is the output of this C code?

```
#include<stdio.h>

int main()

{

    int a[][] = {{1,2},{3,4}};

    int i, j;

    for (i = 0; i < 2; i++)

        for (j = 0; j < 2; j++)

            printf("%d ", a[i][j]);

    return 0;

}
```

1.4 garbage values

2.1 2 3 4

3.Compiler Error in line " int a[][] = {{1,2},{3,4}};"

4.4 3 2 1

Answer: 3

Q1173: What is the output of this code?

```
#include<stdio.h>

int main()

{
```

```
char p;  
  
char buf[10] = {1, 2, 3, 4, 5, 6, 9, 8};  
  
p = (buf + 1)[5];  
  
printf("%d\n", p);  
  
return 0;  
  
}
```

1.8

2.7

3.6

4.9

Answer: 4

Q1174: What is the output?

```
#include <stdio.h>  
  
void main()  
{  
  
    int a=3,b=2;  
  
    a=a==b==0;  
  
    printf("%d,%d",a,b);  
  
}
```

1.1,2

2.3,2

3.0,0

4.2,3

Answer: 1

Q1175: What is the purpose of \$_SESSION[]?

- 1.Used to register a global variable
- 2.Used to initialize a session
- 3.Used to store variables of the current session
- 4.Used to initialize a cookie

Answer: 3

Q1176: What is the relationship between the priority of task and their period in RMS?

1. decreases
- 2.increases
- 3.remains unchanged
- 4.linear

Answer: 1

Q1177: What is the result of the following code snippet? `window.location === document.location`

1.False 2.True 3.0 4.1

Answer: 2

Q1178: What is the `strpos()` function used for?

1.Find the last occurrence of the string within a string 2.Find the first occurrence of the string within a string 3.Find both last and first occurrence 4.Search for all occurrence within a string

Answer: 2

Q1179: What is the time complexity for binary search

1. $O(\log n)$ 2. $O(n^2)$ 3. $O(1)$ 4. $O(2n)$

Answer: 1

Q1180: What is the time complexity for insertion sort

1. $O(\log n)$ 2. $O(n)$ 3. $O(n^2)$ 4. $O(1)$

Answer: 3

Q1181: What is the type of network in which the routers themselves are mobile?

1. Wide Area Network

2. Mobile Ad hoc Network

3. Mobile Network

4. Local Area Network

Answer: 2

Q1182: What is the worst case for Selection sort

1. $O(\log n)$ 2. $O(2n)$ 3. $O(n)$ 4. $O(n^2)$

Answer: 4

Q1183: What is Wired Equivalent Privacy(WEP)?

1.security algorithm for ethernet

2.security algorithm for wireless networks

3.security algorithm for USB

4.None

Answer: 2

Q1184: What is WPA?

1.wi-fi protected access

2.wired protected access

3.wired process access

4.wi-fi process access

Answer: 1

Q1185: What is x+ mode in fopen() used for?

1.Read/Write. Creates a new file. Returns FALSE and an error if file already exists

2. Write only. Creates a new file. Returns TRUE and an error if file already exists

3. Read/Write. Opens and clears the contents of file

4. Write. Opens and clears the contents of file

Answer: 1

Q1186: What keyword covers unhandled possibilities?

1. other 2. default 3. contingency 4. all

Answer: 2

Q1187: What kind of schema is it?

Student(sid, sname, dob, address, pincode)

1. Relational

2. Logical Schema

3. Conceptual Schema

4. External View

Answer: 1

Q1188: What library do you need in order to process images?

1.GD library

2.ZIP library

3.Win32 API library

4.BOGUS library

Answer: 1

Q1189: What type of declaration is this:

unsigned num;

1.num is unsigned integer

2.num is unsigned float

3.num is unsigned character

4.Invalid declaration

Answer: 4

Q1190: What type of register would shift a complete binary number in one bit at a time and shift all

the stored bits out one bit at a time?

1.PIPO 2.PISO 3.SIPO 4.SISO

Answer: 4

Q1191: What will be the output of following code?

```
#include <stdio.h>

int main()
{
int x=10,y=20;

if(x==y)

printf("%d\t%d",x,y);

return 0;
}
```

1.10 20

2.error

3.Prints nothing

4.Garbage value Garbage value

Answer: 3

Q1192: What will be the output of the C program?

```
#include<stdio.h>

#define square(x) x*x

int main()

{

    int i;

    i = 64/square(4);

    printf("%d",i);

    return 0;

}
```

1.8

2.32

3.16

4.64

Answer: 4

Q1193: What will be the output of the C program?

```
#include<stdio.h>

#define x 1+2

int main()

{

    int i;

    i = x * x * x;

    printf("%d",i);

}
```

}

1.8

2.9

3.27

4.7

Answer: 4

Q1194: What will be the output of the C program?

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    char arr[] = "function\0";
```

```
    int num = strlen(a);
```

```
    printf("%d", num);
```

```
    return 0;
```

```
}
```

1.8

2.7

3.6

4.9

Answer: 1

Q1195: What will be the output of the following code?

```
#include "stdio.h"

void main()

{

    int a[10];

    printf("%d %d", a[-1], a[12]);

}
```

1. Garbage value 0

2.0 0

3.Code will not compile

4.Garbage value Garbage Value

Answer: 4

Q1196: What will be the output of the program ?

```
#include "stdio.h"

int main()

{

    int arr[5] = {10};

    printf("%d", 0[arr]);

    return 0;
```

```
}
```

1.0

2.1

3.6

4.10

Answer: 4

Q1197: What will be the output of the program ?

```
#include<stdio.h>
```

```
#include<string.h>
```

```
int main()
```

```
{
```

```
    char str1[5], str2[5];
```

```
    int i;
```

```
    gets(str1);
```

```
    gets(str2);
```

```
    i = strcmp(str1, str2);
```

```
    printf("%d\n", i);
```

```
    return 0;
```

```
}
```

1.Unpredictable integer value

2.error

3.-1

4.0

Answer: 1

Q1198: What will be the output of the program ?

```
#include "stdio.h"
```

```
void main()
```

```
{
```

```
float arr[] = {12.4, 2.3, 4.5, 6.7};
```

```
printf("%d", sizeof(arr)/sizeof(arr[0]));
```

```
}
```

1.4

2.7

3.6

4.5

Answer: 1

Q1199: What will be the output?

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
extern int ok;  
  
printf("value of ok = %d",ok);  
  
return 0;  
  
}  
  
extern int ok=1000;
```

1.Declaration Error

2.value of ok = 1000

3.value of ok = 0

4.Linking Error

Answer: 2

Q1200: What will be the result of the expression 13 & 25

1.25 2.38 3.9 4.12

Answer: 3

Q1201: What will be the status of a computer during storage compaction

1.High paging activity

2.Thrasing happens

3.Working set model developed

4.It will sit idle

Answer: nan

Q1202: What will happen if the first argument of open() is omitted?

1.Error Page 2.Remains in the same page 3.about:blank 4.Open the first page in the history

Answer: 2

Q1203: What will the following script output?

```
<?php
$array = array (1, 2, 3, 5, 8, 13, 21, 34, 55);
$sum = 0;
for ($i = 0; $i < 5; $i++) {
    $sum += $array[$array[$i]];
}
echo $sum;
?>
```

1.78

2.19

3.NULL

4.5

Answer: 1

Q1204: What would be the output of the below code fragment? `var a = ["s","a","v","e"];`
`document.write(a.join(""));`

1.Undefined 2.save 3.vase 4.S

Answer: 2

Q1205: When testing object-oriented software it is important to test each class operation separately as part of the unit testing process.

1.true

2.false

3. 4.

Answer: 2

Q1206: When a new row is inserted the constraints that can be violated are

1.Primary Key constraint

2.Referential Integrity Constraint

3.all of the options

4.Domain Constraint

Answer: 1

Q1207: When a single item that triggers other data flow along one of many paths of a data flow diagram, _____ characterizes the information flow.

1. high coupling

2. poor modularity

3.transaction flow

4. transform flow

Answer: 3

Q1208: When displaying a web page, the application layer uses the

1.HTTP protocol

2.FTP protocol

3.SMTP protocol

4.IMAP Protocol

Answer: 1

Q1209: When operated in slave mode, the PIC outputs its type number only if the cascaded address received on CAS0-CAS2 matches the address programmed in ----- bits D0-D2

1.ICW1 2.ICW2 3.ICW3 4.ICW4

Answer: 4

Q1210: When the overall flow in a segment of a data flow diagram is largely sequential and follows straight-line paths, _____ is present.

1. low coupling

2.good modularity

3. transaction flow

4. transform flow

Answer: 4

Q1211: When the pre-order and post-order traversal of a Binary Tree generates the same output, the tree can have maximum

1.Three nodes 2.Two nodes 3.One node 4.Any number of nodes

Answer: 3

Q1212: When there are infinite distinguishable strings then there cannot be a -----

1.automata

2.finite automata

3.regular expression

4.both finite automata and regular expression

Answer: nan

Q1213: When there is an indefinite or an infinity value during an arithmetic value computation, javascript

1.Prints an exception error

2.Prints an overflow error

3.Displays "Infinity"

4.Prints the value as such

Answer: 3

Q1214: When used with the datalist element, what is the list attribute in HTML5 used to accomplish?

1.Local databases 2.Drop down lists 3.Autocompletion 4.Global Databases

Answer: 2

Q1215: When we concatenate two languages L_1 and L_2 recognized by machine M_1 and M_2 we obtain a machine with final state same as that of _____

1. M_2

2. M_1 and M_2

3. M_1

4. M_1 or M_2

Answer: nan

Q1216: when you were asked to design a relation, you come across a situation, where passport

number is to be included for the people. All the students wont be having passport. So what constraint you would be using?

1.Primary Key

2.Not Null

3.Default

4.Unique

Answer: 4

Q1217: Which of the following is shared between all of the threads in a process? Assume a kernel level thread implementation

1.Register values

2.File descriptors

3.Scheduler priority

4.Local variables

Answer: 2

Q1218: Which activity is concerned with identifying the task at the final embedded systems?

1.scheduling

2.task-level concurrency management

3.high-level transformation

4.compilation

Answer: 2

Q1219: Which buffer is a parallel to serial converter that receives a parallel byte for conversion into a serial signal and further transmission onto the communication channel.

1.Transmit buffer 2.Receive buffer 3.Data bus buffer 4.Modem control

Answer: 1

Q1220: Which character function can be used to return a specified portion of a character string?

1.INSTR

2.SUBSTRING

3.SUBSTR

4.POS

Answer: 3

Q1221: Which command we use to set an image on background?

1.image-background:url('R4R_Logo.jpg') 2.background-image:url('R4R_Logo.jpg')

3.bg-image:url('R4R_Logo.jpg') 4.background-image:href('R4R_Logo.jpg')

Answer: 2

Q1222: Which Data structure is best suited for the UNDO operation in Windows

1.Both Stack and Queues 2.Queues 3.Stack 4.Arrays

Answer: 3

Q1223: Which database level is closest to the users?

1.External

2.Conceptual

3.Internal

4.Physical

Answer: 1

Q1224: Which date function is used to obtain the date of next Wednesday

1.NEXT_DAY

2.LAST_DAY

3.NEXT_DATE

4.All of the options

Answer: nan

Q1225: Which design model is analogous to the detailed drawings of the access points and external utilities for a house?

1.Architectural design

2.Component-level design

3.Data design

4.Interface design

Answer: 4

Q1226: Which directory implementation is used in most of the Operating Systems?

1.Single level directory structure

2.Two level directory structure

3.Tree directory structure

4.Acyclic directory structure

Answer: 3

Q1227: Which directory implementation method creates more dangling pointers?

1.Single level directories

2.Two level directories

3.Tree Structured Directories

4.Acyclic graph directories

Answer: 4

Q1228: Which element is used to draw graphics images on a web page?

1.script 2.audio 3.embed 4.canvas

Answer: 4

Q1229: Which granularity level of testing checks the behavior of module cooperation?

1.Unit Testing

2.Integration Testing

3.Acceptance Testing

4.Regression Testing

Answer: 2

Q1230: Which header file should be included to use functions like malloc() and calloc()?

1.string.h 2.dos.h 3.memory.h 4.stdlib.h

Answer: 4

Q1231: Which Instruction word is used to specify the number of stop bits, data bits, parity bit and the baud rate clock factor for the 8251A USART

1.Mode 2.Command followed by Mode 3.Command 4.Mode followed by command

Answer: nan

Q1232: Which is a major problem with SQL?

1.SQL cannot support object-orientation

2.The same query can be written in many ways, each with vastly different execution plans.

3.SQL syntax is too difficult for non-computer professionals to use

4.SQL creates excessive locks within the database

Answer: 1

Q1233: Which is not related to deadlock avoidance?

1.Safe State

2.Unsafe State

3.Safe Sequence

4.Resource sequence

Answer: nan

Q1234: Which is one of the most important stakeholder from the following ?

1.Entry level personnel

2.Middle level stakeholder

3.Managers

4.Users of the software

Answer: 4

Q1235: Which is the correct way to write a JavaScript array?

1.var txt = new Array(1:"tim",2:"kim",3:"jim")

2.var txt = new Array:1=("tim")2=("kim")3=("jim")

3.var txt = new Array("tim","kim","jim")

4.var txt = new Array="tim","kim","jim"

Answer: 3

Q1236: Which is used to store critical pieces of data during subroutines and interrupts

1.Stack

2.Queue

3.Accumulator

4.Data register

Answer: 1

Q1237: Which item is an example of a physical network address?

1.IP address 2.MAC address 3.Workstation name 4.www.proprofs.com

Answer: 2

Q1238: Which JavaScript function is most useful for finding errors?

1.Confirm 2.Prompt 3.Debug 4.Alert

Answer: 3

Q1239: Which level simulates the algorithms that are used within the embedded systems?

1.algorithmic level

2.switch level

3.gate level

4.circuit level

Answer: 1

Q1240: Which memory storage is widely used in PCs and Embedded Systems?

1.EEPROM

2.Flash memory

3.SRAM

4.DRAM

Answer: 4

Q1241: Which method bypasses the CPU for certain types of data transfer?

1.Software interrupts

2.Interrupt-driven I/O

3.Polled I/O

4.Direct memory access (DMA)

Answer: 4

Q1242: Which method is used for loading the driver in Java JDBC.

1.getDriver() method

2.class.forName()

3.createStatement()

4.getConnection()

Answer: nan

Q1243: Which method is used to search for a substring?

1.stringVariable.substring(subString)

2.stringVariable.find(subString)

3.stringVariable.indexOf(subString)

4.stringVariable.indexOf(charAt(0))

Answer: 3

Q1244: Which model can be selected if user is involved in all the phases of SDLC?

1.Waterfall Model

2.Prototyping Model

3.RAD Model

4.Prototyping Model and RAD model

Answer: 3

Q1245: Which model depicts the profile of the end users of a computer system?

1.design model

2.implementation model

3. user model

4.client model

Answer: 3. user model

Q1246: Which multiple access technique is used by IEEE 802.11 standard for wireless LAN?

1.CDMA

2.CSMA/CA

3.ALOHA

4.CSMA/CD

Answer: 2. CSMA/CA

Q1247: Which of the below given sorting techniques has highest best-case runtime complexity?

1.bubble sort 2.insertion sort 3.quick sort 4.selection sort

Answer: 4. Selection sort

Q1248: Which of the following (in file scope) leads to a compile-time error?

1.const int a=90; 2.const int f1() { return 100; } 3.int f2() const { return 200; } 4.const int f3(const int i)
{ return 300;}

Answer: 3.int f2() const { return 200; }

Q1249: Which of the following activities is not one of the four things that need to be accomplished by the generic planning task set?

1. Develop overall project strategy
2. Identify the functionality to deliver in each software increment
3. Create a detailed schedule for the complete software project
4. Devise a means of tracking progress on a regular basis

Answer: 3. Create a detailed schedule for the complete software project

Q1250: Which of the following addressing modes are suitable for program relocation at run time?

1. Absolute addressing

- 2. Based addressing
- 3. Relative addressing
- 4. Indirect addressing

1.1 and 4

2.1 and 2

3.2 and 3

4.1,2 and 4

Answer: 3.2 and 3

Q1251: Which of the following algorithm design technique is used in the quick sort algorithm?

- 1.Greedy method 2.Backtracking 3.Divide and conquer 4.Dynamic programming

Answer: 3.Divide and conquer

Q1252: Which of the following algorithm is Minimum Spanning Tree in graph

- 1.Dijkstra's algorithm 2.AVL Tree algorithm 3.Kruskal's algorithm 4.Merge algorithm

Answer: 3.Kruskal's algorithm

Q1253: Which of the following algorithm is used to find the shortest path between two nodes in graph

1.Dijkstra's algorithm 2.Prim's algorithm 3.Kruskal's algorithm 4.Merge algorithm

Answer: 1.Dijkstra's algorithm

Q1254: Which of the following are decidable?

- I. Whether the intersection of two regular languages is infinite
- II. Whether a given context-free language is regular
- III. Whether two push-down automata accept the same language
- IV. Whether a given grammar is context-free

- 1.I and II
- 2.I and IV
- 3.II and III
- 4.I and III

Answer: 2.I and IV

Q1255: Which of the following attribute is needed for file upload via form?

- 1.enctype='multipart/form-data'
- 2.enctype='singlepart/data'

3.enctype='file'

4.enctype='form-data/file'

Answer: 1.enctype='multipart/form-data'

Q1256: Which of the following can be a valid column name?

1.Column

2.1966_Invoices

3.Catch_#22

4.#Invoices

Answer: 2.1966_Invoices

Q1257: Which of the following can't be done with client-side JavaScript?

1.Validating a form 2.Sending a form's contents by email 3.Storing the form's contents to a database file on the server 4.Testing the form

Answer: 3.Storing the form's contents to a database file on the server

Q1258: Which of the following case does not exist in complexity theory?

1.Average case 2.Worst case 3.Best case 4.Null case

Answer: 4.Null case

Q1259: Which of the following command words need to be programmed to operate a single PIC in fully nested mode with an 8086 microprocessor

1.ICW1 and ICW2 2.ICW1, ICW2 and ICW4 3.ICW2 and ICW3 4.ICW1 and ICW4

Answer: nan

Q1260: Which of the following correctly describes C++ language?

1.Statically typed language 2.Dynamically typed language 3.Both Statically and dynamically typed language 4.Type-less language

Answer: 4.Type-less language

Q1261: Which of the following describes a handle (as applicable to LR-parsing) appropriately?

1. It is the position in a sentential form where the next shift or reduce operation will occur

2.It is non-terminal whose production will be used for reduction in the next step

3.It is a production that may be used for reduction in a future step along with a position in the sentential form where the next shift or reduce operation will occur

4. It is the production p that will be used for reduction in the next step along with a position in the sentential form where the right hand side of the production may be found

Answer: 4. It is the production p that will be used for reduction in the next step along with a position in the sentential form where the right hand side of the production may be found

Q1262: Which of the following explains cookies nature?

1.Non Volatile 2.Volatile 3.Intransient 4.Transient

Answer: 4.Transient

Q1263: Which of the following file access method needs a relative block number 'n'?

1.Contiguous allocation

2.Linked allocation

3.Direct access

4.Sequential access

Answer: 3.Direct access

Q1264: Which of the following function is used to terminate the script execution in PHP?

1.break()

2.quit()

3.die()

4.exit()

Answer: 4.exit()

Q1265: Which of the following function sets first n characters of a string to a given character?

1.strset() 2.strnset() 3.strinit() 4.strcset()

Answer: 2.strnset()

Q1266: Which of the following grammar rules violate the requirements of an operator grammar ? P,
Q, R are nonterminals, and r, s, t are terminals.

1. P - Q R
2. P - Q s R
3. P - e
4. P - Q t R r

1.1 and 3 only

2.1 only

3.2 and 3 only

4.1,2,3 and 4 only

Answer: 1.1 and 3 only

Q1267: Which of the following helps in reducing the energy consumption of the embedded system?

1.emulator

2. debugger

3.simulator

4.compilers

Answer: 4.compilers

Q1268: which of the following intermediate language can be used in intermediate code generation?

1.Postfix notation and Three address code 2.Quadraples 3.Triples 4.Infix notation and two address code

Answer: 1.Postfix notation and Three address code

Q1269: Which of the following is a black box testing strategy?

1.All Statements Coverage

2.Control Structure Coverage

3.Cause-Effect Graphs

4.ALL

Answer: 3.Cause-Effect Graphs

Q1270: Which of the following is a comparison operator in SQL?

1.=

2.LIKE

3.BETWEEN

4.all of the options

Answer: 1. =

Q1271: Which of the following is a dynamic model that shows how the system interacts with its environment as it is used?

1.system context model

2.interaction model

3.environmental model

4. both system context and interaction

Answer: 2.interaction model

Q1272: Which of the following is a legal expression in SQL?

1.SELECT NULL FROM EMPLOYEE;

2.SELECT NAME FROM EMPLOYEE;

3.SELECT NAME FROM EMPLOYEE WHERE SALARY = NULL;

4.None of the options

Answer: 2.SELECT NAME FROM EMPLOYEE;

Q1273: Which of the following is a problem of file management system?

- 1.difficult to update
- 2.lack of data independence
- 3.data redundancy
- 4.all options given

Answer: 4.all options given

Q1274: Which of the following is a project scheduling method that can be applied to software development?

- 1.PERT
- 2.CPM
- 3.CMM
- 4.both PERT and CPM

Answer: 4.both PERT and CPM

Q1275: Which of the following is a wrong example of network layer

1.X.25 level 2-ISO 2.Source routing and Domains Naming Usenet 3.X.25 packet land protocols (PLP-ISO) 4.Internet protocol (I/P) ARPA NET

Answer: 1.X.25 level 2-ISO

Q1276: which of the following is an incorrect definition inside a class ?

1.void * operator new(size_t size) { } 2.void * operator new () { } 3.void operator delete(void * ptr) { }
4.int operator ++() { }

Answer: nan

Q1277: which of the following is an incorrect definition inside a class ?

1.void * operator new(size_t size) { } 2.void * operator new () { } 3.void operator delete(void * ptr) { }
4.int operator ++() { }

Answer: nan

Q1278: Which of the following is false for cin?

1.It is a class of which stream is an object. 2.Using cin, the data can be read from user's terminal.

3.It represents standard input. 4.It is an object of istream class.

Answer: 1.It is a class of which stream is an object

Q1279: Which of the following is golden rule for interface design?

1.Place the user in control

2.Reduce the user's memory load

3.Make the interface consistent

4.ALL

Answer: 4. ALL

Q1280: Which of the following is lowest in memory hierarchy?

1.Cache memory

2.Secondary memory

3. Registers

4. RAM

Answer: 2.Secondary memory

Q1281: Which of the following is not a binary operator in relational algebra?

1.Join

2.Semi-Join

3.Assignment

4.Project

Answer: 4.Project

Q1282: Which of the following is not a form of memory ?

1.Instruction cache

2.Instruction register

3.Instruction opcode

4.Translation-a-side buffer

Answer: 3.Instruction opcode

Q1283: Which of the following is not a property of a transaction?

1.atomicity

2.consistency

3.dirty read

4.durability

Answer: 3.dirty read

Q1284: Which of the following is not a SQA plan for a project?

1.evaluations to be performed

2.amount of technical work

3.audits and reviews to be performed

4.documents to be produced by the SQA group

Answer: 2.amount of technical work

Q1285: Which of the following is not a valid attribute of the INPUT tag?

1.TEXT 2.NAME 3.SIZE 4.MAXLENGTH

Answer: 1.TEXT

Q1286: Which of the following is NOT a valid PHP comparison operator?

1.!= 2.>= 3.&&& 4.===

Answer: 3.&&&

Q1287: Which of the following is not an example of infrastructure components that may need to be integrated into the software architecture?

1.Communications components

2.Database components

3. Interface components

4.Memory management components

Answer: 3. Interface components

Q1288: Which of the following is not characteristics of a relational database model

1.Complex logical relationships 2.Treelike structure 3.Tables 4.Records

Answer: 2.Treelike structure

Q1289: Which of the following is not considered as a risk in project management?

1.Specification delays

2.Product competition

3.Testing

4.Staff turnover

Answer: 3.Testing

Q1290: Which of the following is not hardware:

1.Magnetic tape

2.Printer

3.VDU terminal

4. Assembler

Answer: 4. Assembler

Q1291: Which of the following is not one of Hooker's core principles of software engineering practice?

- 1.All design should be as simple as possible, but no simpler
- 2.A software system exists only to provide value to its users.
- 3.Pareto principle (20% of any product requires 80% of the effort)
4.
Remember that you produce others will consume

Answer: 3.Pareto principle (20% of any product requires 80% of the effort)

Q1292: Which of the following is not one of the principles of good coding?

- 1.Create unit tests before you begin coding
2. Create a visual layout that aids understanding
3. Keep variable names short so that code is compact
- 4.Write self-documenting code, not program documentation

Answer: 3. Keep variable names short so that code is compact

Q1293: Which of the following is not possible using PHP?

- 1.Deleting files from the server
- 2.Redirect a visitor to another page
- 3.Set the value of the window statusbar
- 4.Obtain the IP address of a Visitor

Answer: nan

Q1294: Which of the following is not the attribute of FCB?

- 1.File permissions
- 2.Program Counter
- 3.Access Control List
- 4.Pointers to file control blocks

Answer: nan

Q1295: Which of the following is not the characteristic of constructor?

- 1.They should be declared in the onlineexam.section.
- 2.They do not have return type.
- 3.They can not be inherited.
- 4.They can be virtual.

Answer: 4. They can be virtual

Q1296: Which of the following is the best type of module cohesion?

1.Functional Cohesion

2.Temporal Cohesion

3.Functional Cohesion

4.Sequential Cohesion

Answer: 1.Functional Cohesion

Q1297: Which of the following is the common method for connecting the peripheral to the processor?

1. software

2. exception

3.external interrupts

4.internal interrupts

Answer: 3.external interrupts

Q1298: Which of the following is the worst type of module coupling?

1.Control Coupling

2.Stamp Coupling

3.External Coupling

4.Content Coupling

Answer: 3.External Coupling

Q1299: Which of the following is true?

1.Segmentation is faster than paging

2.Paging is faster than segmentation

3.Pages are unequal sized pieces

4.Segments are equal sized pieces

Answer: 2.Paging is faster than segmentation

Q1300: Which of the following is TRUE?

1. Every subset of a regular set is regular.
2. Every finite subset of a non-regular set is regular.
3. Every finite subset of a non-regular set is regular.
4. Infinite union of finite sets is regular.

Answer: 2

Q1301: Which of the following is TRUE?

1. Every relation in 2NF is also in BCNF
2. A relation R is in 3NF if every non-prime attribute of R is fully functionally dependent on every key of R
3. Every relation in BCNF is also in 3NF
4. No relation can be in both BCNF and 3NF

Answer: 3

Q1302: Which of the following is true?

- 1.The complement of a recursive language is recursive.
- 2.The complement of a recursively enumerable language is recursively enumerable
- 3.The complement of a recursive language is either recursive or recursively enumerable
- 4.The complement of a context-free language is context-free

Answer: 1

Q1303: Which of the following is useful in traversing a given graph by breadth first search?

- 1.List
- 2.Queue
- 3.Set
- 4.Stack

Answer: 2

Q1304: Which of the following is valid reason for collecting customer feedback concerning delivered software?

- 1.Do not allows developers to make changes to the delivered increment
- 2.Delivery schedule can be revised to reflect changes

3.Developers can not identify changes to incorporate into next increment

4.Delivery schedule can't be revised to reflect changes

Answer: 2

Q1305: Which of the following is/are the DDL statements?

1.Create

2.Drop

3.Alter

4.All of the options

Answer: 4

Q1306: Which of the following languages are context-free?

$L1 = \{a^m b^n a^n b^m \mid m, n \geq 1\}$

$L2 = \{a^m b^n a^m b^n \mid m, n \geq 1\}$

$L3 = \{a^m b^n \mid m = 2n + 1\}$

1.L1 and L2 only

2.L1 and L3 only

3.L3 only

4.L1 only

Answer: 2

Q1307: Which of the following memory allocation scheme suffers from External fragmentation?

1.Segmentation

2.Pure Demand Paging

3.swapping

4.paging

Answer: 1

Q1308: Which of the following most certainly implies the need for an entire table to implement?

1.A binary relationship

2.A ternary relationship

3.A recursive relationship

4.An identifying relationship

Answer: 2

Q1309: Which of the following name does not relate to stacks?

- 1.FIFO lists
- 2.LIFO list
- 3.Push-down lists
- 4.Piles

Answer: 1

Q1310: Which of the following operation is used if we are interested in only certain columns of a table?

- 1.PROJECTION
- 2.SELECTION
- 3.UNION
- 4.JOIN

Answer: 1

Q1311: Which of the following operator can be overloaded through friend function?

- 1.->

2.=

3.()

4.*

Answer: 2

Q1312: Which of the following operators has an associativity from Right to Left?

1.+=

2.==

3.<<

4.<=

Answer: 1

Q1313: Which of the following pattern is the basis of interaction management in many web-based systems?

1.architecture

2.repository pattern

3.model-view-controller

4.different operating system

Answer: 3

Q1314: Which of the following periodic scheduling is dynamic?

1.RMS

2.EDF

3.LST

4.LL

Answer: 2

Q1315: Which of the following problems is undecidable?

1.Membership problem for CFGs

2.Ambiguity problem for CFGs.

3.Finiteness problem for FSAs

4.Equivalence problem for FSAs.

Answer: 2

Q1316: Which of the following problems is undecidable?

1. Deciding if a given context-free grammar is ambiguous.
2. Deciding if a given string is generated by a given context-free grammar
3. Deciding if the language generated by a given context-free grammar is empty
4. Deciding if the language generated by a given context-free grammar is finite.

Answer: 1

Q1317: Which of the following process is concerned with analyzing the costs and benefits of proposed changes?

1. Change management
2. Version management
3. System building
4. Release management

Answer: 1

Q1318: Which of the following processors uses big endian representation?

1.8086

2.ARM

3.PowerPC

4.Zilog Z80

Answer: 3

Q1319: Which of the following property allows you to specify an element's position with respect to the browser window?

1.relative

2.fixed

3.static

4.absolute

Answer: 2

Q1320: Which of the following risk is the failure of a purchased component to perform as expected?

1.Product risk

2. Project risk

3. Business risk

4. Programming risk

Answer: 1

Q1321: Which of the following risks are derived from the organizational environment where the software is being developed?

1. People risks

2. Technology risks

3. Estimation risks

4. Organizational risks

Answer: 4

Q1322: Which of the following risks are derived from the software or hardware technologies that are used to develop the system?

1. Managerial risks

2. Technology risks

3. Estimation risks

4. Organizational risks

Answer: 2

Q1323: Which of the following statements about queues is incorrect?

1. Queues are first-in, first-out (FIFO) data structures

2. Queues can be implemented using arrays

3. Queues can be implemented using linked lists

4. New nodes can only be added at the front of the queue

Answer: 4

Q1324: Which of the following statements are true in c++?

1. Class members are public by default.

2. Structures can not have functions as members.

3. Classes can not have data as members.

4. Structures can have functions

Answer: 1

Q1325: Which of the following statements are TRUE?

- I. There exist parsing algorithms for some programming languages whose complexities are less than $O(n^3)$.
- II. A programming language which allows recursion can be implemented with static storage allocation.
- III. No L-attributed definition can be evaluated in The framework of bottom-up parsing.
- IV. Code improving transformations can be performed at both source language and intermediate code level.

1.I and II

2.I and IV

3.III and IV

4.I, II and III

Answer: 2

Q1326: Which of the following statements best describes the operation of a synchronous up-/down-counter?

- 1.In general, the counter can be reversed at any point in its counting sequence.
- 2.The counter can be reversed, but must be reset before counting in the other direction.
- 3.The counter can count in either direction, but must continue in that direction once started.

4.The count sequence cannot be reversed, once it has begun, without first resetting the counter to zero.

Answer: 1

Q1327: Which of the following statements explains portability in non-functional requirements?

1.It is a degree to which software running on one platform can easily be converted to run on another platform.

2.It can be enhanced by using languages, OS' and tools that are universally available and standardized.

3.The ability of the system to behave consistently in a user-acceptable manner when operating within the environment for which the system was intended.

4.It is a degree to which software running on one platform can easily be converted to run on another platform as well as It can be enhanced by using languages, OS' and tools that are universally available and standardized.

Answer: 1

Q1328: Which of the following statements is false?

1.Every NFA can be converted to an equivalent DFA

2. Every non-deterministic Turing machine can be converted to an equivalent deterministic Turing machine

3. Every regular language is also a context-free language

4. Every subset of a recursively enumerable set is recursive

Answer: 4

Q1329: Which of the following statements is NOT valid about operator overloading?

1. Overloaded operator must have at least one operand of its class type.
2. Only existing operators can be overloaded.
3. The overloaded operators follow the syntax rules of the original operator.
4. The arity of the operator can be changed

Answer: 4

Q1330: Which of the following statements is NOT valid about operator overloading?

1. Overloaded operator must have at least one operand of its class type.
2. Only existing operators can be overloaded.
3. The overloaded operators follow the syntax rules of the original operator.
4. The arity of the operator can be changed

Answer: 4

Q1331: Which of the following statements is true?

1. Quadruples have some disadvantages over triples notation for an optimizing compiler
2. For optimizing compiler, moving a statement that defines a temporary value requires us to change all references to that statements. It is an overhead for triples notation
3. For optimizing compiler, triples notation has important benefit where statements are often moved around as it incurs no movements or change
4. All the statements are false

Answer: 2

Q1332: Which of the following statements is true?

1. An INPUT field of type password provides excellent security
2. An INPUT field of type password provides a masked field but no real security
3. A maximum length can not be set for a password field
4. A password INPUT field can only be included in a FORM that uses the get METHOD

Answer: 2

Q1333: Which of the following statements is/are TRUE for an undirected graph? P: Number of odd degree vertices is even, Q: Sum of degrees of all vertices is even

- 1.P Only
- 2.Q Only
- 3.Both P and Q
- 4.Neither P nor Q

Answer: 1

Q1334: Which of the following statements is/are TRUE for an undirected graph?P:Number of odd degree vertices is even,Q: Sum of degrees of all vertices is even

- 1.P Only
- 2.Q Only
- 3.Both P and Q
- 4.Neither P nor Q

Answer: 1

Q1335: Which of the following strategies means that the impact of the risk will be reduced?

- 1.Avoidance strategies
- 2.Minimization strategies
- 3.Contingency plans

4.ALL

Answer: 2

Q1336: Which of the following system calls results in the sending of SYN packets?

1.socket

2.bind

3.listen

4.connect

Answer: 4

Q1337: Which of the following task swapping method is a better choice in the embedded systems design?

1.time slice

2.RMS

3.cooperative multitasking

4.pre-emptive

Answer: 4

Q1338: Which of the following term is best defined by the statement "The creation of a new codeline from a version in an existing codeline"?

1.Branching

2.Merging

3.Codeline

4.Mainline

Answer: 1

Q1339: Which of the following term is best defined by the statement: "Derive traceability information to maximize information hiding in the design."?

1.Underestimated development time

2.Organizational restructuring

3. Requirements changes

4.None

Answer: 3

Q1340: Which of the following term is best defined by the statement: "The underlying technology on which the system is built is superseded by new technology."?

1.Technology change

2.Product competition

3.Requirements change

4.None

Answer: 1

Q1341: Which of the following term is best defined by the statement: "There will be a change of organizational management with different priorities."?

1.Staff turnover

2.Technology change

3.Management change

4.Product competition

Answer: 3

Q1342: Which of the following traits need to exist among the members of an agile software team?

1.Competence

2.Decision-making ability

3.Mutual trust and respect

4.ALL

Answer: 4

Q1343: Which of the following tree may have smaller elements in its left subtree and larger element in its right subtree

1.B+ Tree 2.AVL Tree 3.Binary tree 4.Binary search Tree

Answer: 4

Q1344: Which of the following uses a preemptive periodic scheduling algorithm?

1.Pre-emptive scheduling

2.RMS

3.LL

4.LST

Answer: 2

Q1345: Which of the following ways below is correct to write a CSS?

1.p {color:red;text-align:center};

2.p {color:red;text-align:center}

3.p {color:red;text-align:center;}

4.p (color:red;text-align:center;)

Answer: 3

Q1346: Which of the following would cause quickest access

1. direct access from a magnetic tape

2. direct access from a hard disk

3. direct access from a floppy disk

4. direct access from a cassette tape

Answer: 2

Q1347: Which of the regular expressions given below represent the following DFA?

I) $0^*1(1+00^*1)^*$

II) $0^*1^*1+11^*0^*1$

III) $(0+1)^*1$

1. I and II only

2. I and III only

3. II and III only

4. I, II, III

Answer: 3

Q1348: Which of these contains an executable statement?

1. `// var a = 0; // var b = 0;`
2. `/* var a = 0; // var b = 0; */`
3. `/* var a = 0; */ var b = 0;`
4. `// var a = 0; /* var b = 0; */`

Answer: 3

Q1349: Which of these does not belong to the basic principles of good product design ?

1. Adequacy
2. Feasibility
3. Portability
4. Economy

Answer: 3

Q1350: Which of these framework activities is not normally associated with the user interface design processes?

1. cost estimation
2. interface construction

3. interface validation
4. user and task analysis

Answer: 1

Q1351: Which of these is incorrect ?

1. Software engineering belongs to Computer science
2. Software engineering is a part of more general form of System Engineering
3. Computer science belongs to Software engineering
4. Software engineering is concerned with the practicalities of developing and delivering useful software

Answer: 3

Q1352: Which of these is not an element of an object-oriented analysis model?

1. Behavioral elements
2. Class-based elements
3. Data elements

4.Scenario-based elements

Answer: 3

Q1353: Which of these sets of HTML5 attributes can be used for form validation?

1.required, pattern, min and max

2.auto, fixed, number

3.number, text, currency

4.input, radio,checkbox

Answer: 1

Q1354: Which one is not a self complementary code?

1.8 4 -2 -1

2.4 8 1 2

3.4 4 3 -2

4.2 4 2 1

Answer: 2

Q1355: Which one of the following is currently the most popular data model?

1. Network Model
2. Object Model 3. Notation Model
4. Relational Model

Answer: 4

Q1356: Which one of the file allocation scheme cannot be adopted for c

1. Linked allocation
2. Fixed Indexed allocation
3. Variable Indexed allocation
4. Contiguous allocation

Answer: 3

Q1357: Which one of the following algorithm is not used in asymmetric-key cryptography?

1. RSA algorithm
2. diffie-hellman algorithm
3. electronic code book algorithm

4.ECC

Answer: 3

Q1358: Which one of the following allows a user at one site to establish a connection to another site and then pass keystrokes from local host to remote host?

1.HTTP

2.FTP

3.telnet

4.none of the mentioned

Answer: 3

Q1359: Which one of the following correctly describes the meaning of 'namespace' feature in C++?

1.namespaces provide facilities for organizing the names in a program to avoid name clashes

2.Namespaces refer to space between the names in a program 3.Namespaces refer to the memory space allocated for names used in a program 4.Namespaces refer to the space for names.

Answer: 1

Q1360: Which one of the following event is not possible in wireless LAN.

- 1.collision detection
- 2.Acknowledgement of data frames
- 3.multi-mode data transmission
- 4.none of the mentioned

Answer: 1

Q1361: Which one of the following is a cryptographic protocol used to secure HTTP connection?

- 1.stream control transmission protocol (SCTP)
- 2.transport layer security (TSL)
- 3.explicit congestion notification (ECN)
- 4.resource reservation protocol

Answer: 2

Q1362: Which one of the following is a requirement that fits in a developer's module ?

1.Availability

2.Testability

3. Usability

4.Flexibility

Answer: 2

Q1363: Which one of the following is an internet standard protocol for managing devices on IP network?

1.dynamic host configuration protocol

2.simple network management protocol

3.internet message access protocol

4.media gateway protocol

Answer: 2

Q1364: Which one of the following is FALSE?

1.

A basic block is a sequence of instructions where control enters the sequence at the beginning and exits at the end.

2. Available expression analysis can be used for common subexpression elimination.

3. Live variable analysis can be used for dead code elimination.

4. $x = 4 * 5 \Rightarrow x = 20$ is an example of common subexpression elimination.

Answer: 4

Q1365: Which one of the following is FALSE?

1. There is unique minimal DFA for every regular language

2. Every NFA can be converted to an equivalent PDA

3. Complement of every context-free language is recursive

4. Every nondeterministic PDA can be converted to an equivalent deterministic PDA

Answer: 4

Q1366: Which one of the following is not a step of requirement engineering?

1.Elicitation

2.Design a model

3.Analysis

4.Documentation

Answer: 2

Q1367: Which one of the following is not a windows file system?

1.FAT

2.NTFS

3.FAT32

4.EXT

Answer: 4

Q1368: Which one of the following is not an application layer protocol?

1.media gateway protocol

2.dynamic host configuration protocol

3.resource reservation protocol

4.session initiation protocol

Answer: 3

Q1369: Which one of the following is not correct?

1.application layer protocols are used by both source and destination devices during a communication session

2.application layer protocols implemented on the source and destination host must match

3.both the options

4.

Answer: 3

Q1370: Which one of the following is not the process of Deadlock Recovery?

1.Killing a process

2.Rollback to the previous state

3.Selecting a Victim

4.Delaying the process

Answer: 4

Q1371: Which one of the following is not the responsibility of the DBA?

1.provide security

2.develop applications

3.periodically tunes the database

4.restores the system after a failure

Answer: 2

Q1372: Which one of the following is the recurrence equation for the worst case time complexity of the Quicksort algorithm for sorting $n \geq 2$ numbers? In the recurrence equations given in the options below, c is a constant.

1. $T(n) = 2T(n/2) + cn$ 2. $T(n) = T(n-1) + T(0) + cn$ 3. $T(n) = T(n/2) + cn$ 4. $T(n) = 2T(n-2) + cn$

Answer: 2

Q1373: Which one of the following is the very first task executed by a session enabled page?

- 1.Delete the previous session
- 2.Start a new session
- 3.Check whether a valid session exists
- 4.Handle the session

Answer: 3

Q1374: Which one of the following is True at any valid state in shift-reduce parsing?

- 1.Viable prefixes appear only at the bottom of the stack and not inside
- 2.Viable prefixes appear only at the top of the stack and not inside
- 3.The stack contains only a set of viable prefixes
- 4.The stack never contains viable prefixes

Answer: 3

Q1375: Which one of the following is used as the start frame delimiter in ethernet frame?

- 1.10101010

2.10101011

3.00000000

4.11111111

Answer: 2

Q1376: Which one of the following languages over the alphabet $\{0,1\}$ is described by the regular expression: $(0+1)^*0(0+1)^*0(0+1)^*$?

1.The set of all strings containing the substring 00.

2.The set of all strings containing at most two 0's.

3.The set of all strings containing at least two 0's.

4.The set of all strings that begin and end with either 0 or 1.

Answer: 3

Q1377: Which one of the following models is not suitable for accommodating any change?

1.Build & Fix Model

2.Prototyping Model

3.RAD model

4.Waterfall Model

Answer: 4

Q1378: Which one of the following modulation scheme is supported by WiMAX?

1.binary phase shift keying modulation

2.quadrature phase shift keying modulation

3.quadrature amplitude modulation

4.all of the mentioned

Answer: 4

Q1379: Which one of the following protocol delivers/stores mail to receiver server?

1.simple mail transfer protocol

2.post office protocol

3.internet mail access protocol

4.hypertext transfer protocol

Answer: 1

Q1380: Which one of the following regular expressions over $\{0, 1\}$ denotes the set of all strings not containing 100 as a substring (a) $0^*(11)^*0^*$ (b) $(0^*1010)^*$ (c) 0^*1^*010 (d) $0^*(10)^*01^*$

1.a and b

2.b and c

3.only c

4.only b

Answer: 3

Q1381: Which one of the following statements is FALSE?

1.Any relation with two attributes is in BCNF

2.A relation in which every key has only one attribute is in 2NF

3.A prime attribute can be transitively dependent on a key in a 3 NF relation.

4.A prime attribute can be transitively dependent on a key in a BCNF relation.

Answer: 4

Q1382: Which one of the following uses 8B/6T encoding scheme

1.100 Base-T1 2.100 Base-T4 3.100 Base TX 4.100 Base-FX

Answer: 2

Q1383: Which property is used to obtain browser vendor and version information?

1.modal 2.version 3.browser 4.navigator

Answer: 4

Q1384: Which protocol ensure that all nodes are treated fairly with respect to bandwidth allocation?

1.MAC

2.MACAW

3.BTMA

4.PRMA

Answer: 1

Q1385: Which protocol is a signalling communication protocol used for controlling multimedia communication sessions?

1.session initiation protocol

2.session modelling protocol

3.session maintenance protocol

4.none of the mentioned

Answer: 1

Q1386: Which question no longer concerns the modern software engineer?

1.Why does computer hardware cost so much?

2.Why does software take a long time to finish?

3.Why does it cost so much to develop a piece of software?

4.Why can't software errors be removed from products prior to delivery?

Answer: 1

Q1387: Which searching technique is better, if unsorted array is given as input

1.Radix search 2.Linear search 3.Binary search 4.Indexd sequential search

Answer: 2

Q1388: Which segments of a seven-segment display would be active to display the decimal digit 2?

1.a, c, d, f, and g 2.a, b, c, d, and g 3.a, b, d, e, and g 4.a, b, c, d, e, and f

Answer: 3

Q1389: Which SQL functions is used to count the number of rows in a SQL query?

1.Sum

2.Count

3.Max

4.ALL

Answer: 2

Q1390: Which statement does not require semicolon?

1.goto xyz

2.int x = 20

3.#define MAX 100

4.do {... }while(count<=100)

Answer: 3

Q1391: Which statement is true:

1.Standard form must consists of minterms 2.All standard form are canonical forms 3.Canonical form can consist of a term with a literal missing 4.All canonical form are standard form

Answer: 4

Q1392: Which task swap method works in a regular periodic point?

1.cooperative multitasking

2.schedule algorithm

3.pre-emption

4.time slice

Answer: 4

Q1393: Which transmission media has the highest transmission speed in a network?

1.coaxial cable

2.twisted pair cable

3.optical fiber

4.electrical cable

Answer: 3

Q1394: Which type of memory is suitable for low volume production of embedded systems?

1.Non-volatile

2.RAM

3.Volatile

4.ROM

Answer: 1

Q1395: Which of these is a stand alone tag?

1.form

2.frame

3.table

4.anchor

Answer: 2

Q1396: While inserting the elements 71,65,84,69,67,83 in an empty binary search tree(BST)in the sequence shown, the element in the lowest level is

1.65 2.67 3.83 4.69

Answer: 2

Q1397: Why 'critical section' is not imposed on file systems instead 'file locks' when more than one process tries to access the file?

1. Time consuming
2. Process entered in to critical section may close the file
3. we cannot satisfy the three conditions of mutual exclusion, progress and bounded waiting
4. we cannot use semaphore

Answer: 3

Q1398: WiMAX MAC layer provides an interface between

1. higher transport layers and physical layer
2. application layer and network layer
3. data link layer and network layer
4. none of the mentioned

Answer: 1

Q1399: WiMAX provides

- 1.simplex communication
- 2.half duplex communication
- 3.full duplex communication
- 4.none of the mentioned

Answer: 3

Q1400: WiMAX stands for

- 1.wireless maximum communication
- 2.worldwide interoperability for microwave access
- 3.worldwide international standard for microwave access
- 4.none of the mentioned

Answer: 2

Q1401: WiMAX uses the

1.orthogonal frequency division multiplexing

2.time division multiplexing

3.space division multiplexing

4.all of the mentioned

Answer: 1

Q1402: Wireless transmission can be done via

1.radio waves

2.microwaves

3.infrared

4.all of the mentioned

Answer: 4

Q1403: With ----- interrupts, the address of the ISR is fixed to reduce the latency

1. Strobe

- 2.Vectored
- 3.handshake
- 4.fixed

Answer: 2

Q1404: Write Through technique is used in which memory for updating the data _____.

- 1.Virtual memory
- 2. Main memory
- 3.Auxiliary memory
- 4.Cache memory

Answer: 4

Q1405: You can find the element you want to manipulate by _____ way?

- 1.getElementById() 2.getElementsByTagName() 3.getElementsByClassName() 4.All of the these

Answer: 4

Q1406: You have an array of n elements, Suppose you implement quicksort by always choosing the central element of the array as the pivot, Then the tightest upper bound for the worst case performance is

1. $O(\log n)$ 2. $O(n)$ 3. $O(n^2)$ 4. $O(1)$

Answer: 3

Q1407: You have to sort a list L consisting of a sorted list followed by a few "random" elements. Which of the following sorting methods would be especially suitable for such a task?

1.Bubble sort 2.Selection sort 3.Quick sort 4.Insertion sort

Answer: 4

Q1408: You need to check the size of a file in PHP function. $\$size = X(filename)$; Which function will suitably replace 'X'?

1.filesize

2.size

3.sizeofFile

4.getSize

Answer: 1

Q1409: 'Aging registers' are _____.

1.Counters which indicate how long ago their associated pages have been referenced.

2.Registers which keep track of when the program was last accessed

3.Counters to keep track of last accessed instruction

4.Counters to keep track of the latest data structures referred

Answer: 1

Q1410: nan

nan

Answer: nan

Q1411: nan

nan

Answer: nan

Q1412: nan

nan

Answer: nan

Q1413: nan

nan

Answer: nan

Q1414: nan

nan

Answer: nan

Q1415: nan

nan

Answer: nan

Q1416: nan

nan

Answer: nan

Q1417: nan

nan

Answer: nan

Q1418: nan

nan

Answer: nan

Q1419: nan

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Answer: nan

Q1420: nan

nan

Answer: nan

Q1421: nan

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Answer: nan

Q1422: nan

nan

Answer: nan

Q1423: nan

nan

Answer: nan

Q1424: nan

nan

Answer: nan

Q1425: nan

nan

Answer: nan

Q1426: nan

nan

Answer: nan

Q1427: nan

nan

Answer: nan

Q1428: nan

nan

Answer: nan

Q1429: nan

nan

Answer: nan

Q1430: nan

nan

Answer: nan