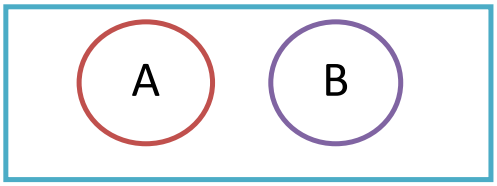
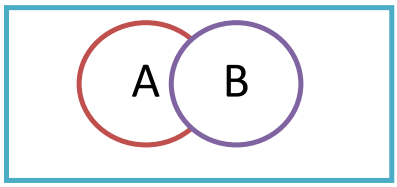
	Question Bank of Mathematical FoundationCA-1.4(254104)	ANS
1)	An ordered collection of objects are called _____ A.Relation B.Set C.Function D.Proposition	**B**
2)	A set is collection of ordered _____. A. Elements B. Numbers C. Objects D. All of the above	**D**
3)	The set 'A' of odd positive numbers less than 10 can show by _____ A.{1, 2, 3} B.{1, 5, 7, 9, 11} C.{1, 2, 5, 9} D.{1, 3, 5, 7, 9}	**D**
4)	What is the Cartesian product of A = {1, 2} and B = {a, c}? A.{(1, a), (1, c), (2, a), (d, c)} B.{(1, 1), (2, 2), (a, a), (d, d)} C.{(1, a), (2, a), (1, c), (2, d)} D.{(1, 1), (a, a), (2, a), (1, c)}	A
5)	The Cartesian Product B x A is equal to the Cartesian product A x B. A.True B.False	**B**
6)	What is the cardinality of the set of odd positive integers less than 10? A. 10 B. 5 C. 3 D. 20	**B**

7)	Which of the following two sets are equal? A. A = {1, 2} and B = {1} B. A = {1, 2} and B = {1, 2, 3} C. A = {1, 2, 3} and B = {2, 1, 3} D. A = {1, 2, 4} and B = {1, 2, 3}	C
8)	The set {0, 1, 2} having Cardinality of the Power set? A.7 B.6 C.8 D.9	**C**
9)	The members of the set S = {x | x is the cube of an integer and x < 10} is _____ A. 1 8 10 B. 1 4 9 C. 1 8 D. None of the above	C
10)	The members of the set S = {x | x is the square of an integer and x < 100} is _____ A.{0, 2, 4, 5, 9, 58, 49, 56, 99, 12} B.{0, 1, 4, 9, 16, 25, 36, 49, 64, 81} C.{1, 4, 9, 16, 25, 36, 64, 81, 85, 99} D.{0, 1, 4, 9, 16, 25, 36, 49, 64, 121}	**B**
11)	The union of the sets {11, 12, 15} and {11, 12, 16} is the set _____ A.{11, 12, 16,} B.{11, 12, 15, 16} C.{11, 12, 11} D.{11, 15, 16, 13}	**B**
12)	The intersection of the sets {1, 2, 5,6} and { 2,3,4,5 6} is the set _____ A.{1, 2 , 4} B.{3, 5, 6} C.{2, 5 ,6 } D.{1,2,3,4,5, 6}	**C**

13)	Two sets are called disjoint if there _____ is the empty set. A.Union B.Difference C.Intersection D.Complement	**C**
14)	The difference of the B-A, where A= {1, 2, 3, 4} and B= {1, 2, 4, 5} is? A.{1} B.{5} C.{3} D.{2}	**B**
15)	What is complement of the set A _____ A.A – B B.U – A C.A – U D.B – A	**C**
16)	Which is the symbol for null set ? A. Σ B. μ C. ∧ D. ϕ	**D**
17)	Let Ai = {i, i+1, i+2, …..}. Then set {n, n+1, n+2, n+3, …..} is the _____ of the set Ai. A.Union B.Intersection C.Set Difference D.Disjoint	**B**
18)	In this diagram A and B are------  A. Equal sets B. Overlapping sets C. Disjoint sets D. None	**C**

19)	In this diagram A and B are------  A. Equal sets B. Disjoint sets C. Both A & B D. None	**D**
20)	Complement of a set B in denoted by A. B' B. B ° C. {B} D. B^2	**A**
21)	What is the set difference of set A with null set is _____ A.A B.null C.U D.B	**A**
22)	Let the set A is {1, 2, 3} and B is {2, 3, 4 ,8}. Then the total number of elements in (A U B) is? A.4 B.5 C.6 D.7	**B**
23)	Let the set A is {1, 2 } and B is {2, 3, 5 }. Then the total number of elements in (A ∩ B) is? A.1 B.2 C.3 D.4	**A**
24)	Let A be set of all prime numbers, B be the set of all even prime numbers, C be the set of all odd prime numbers, then which of the following is true? A.A ≡ B U C B.B is a singleton set. C.A ≡ C U {2} D.All of the mentioned	**D**

25)	If A has 3 elements B has 7 elements then the minimum and maximum number of elements in A U B are _____ A.3, 7 B.7, 10 C.3, 10 D.None of the mentioned	**B**
26)	Two sets A and B contains 'a' and 'b' elements respectively. If power set of A contains 16 more elements than that of B, value of 'b' and 'a' are _____ A.4, 5 B.6, 7 C.2, 3 D.None of the mentioned	**A**
27)	Let A be {11, 22, 23, 44}, U be set of all natural numbers, then U-A'(complement of A.is given by set. A.{11,22,33, 44, 55, 66, ….} B.{55, 66, 77, 88, 99, ……} C.{11, 22, 33, 44 } D.All of the mentioned Answer: c	**C**
28)	Which sets are not empty? A.{x: x is a even prime greater than 3} B.{x : x is a multiple of 2 and is odd} C.{x: x is an even number and x+3 is even} D.{ x: x is a prime number less than 5 and is odd}	**D**
29)	In a disjunction, even if one of the statements is false, the whole disjunction is still... A. False B. Negated C. True D. Both true and false	**C**

30)	Consider the statement form p ⇒ q where p = "If Ram is Puja's father then Puja isniece" and q = "Shyam is Ram's brother." Which of the following statements is equivalent to this statement? A.If Shyam is Ram's Brother, then Ram is Puja's father and Puja is not Shyam'sniece. B. If Shyam is not Ram's Brother, then Ram is Puja's father and Puja is not Shyam's niece. C.If Shyam is not Ram's Brother, then Ram is Puja's father or Puja is Shyam's niece. D.If Shyam is Ram's Brother, then Ram is Puja's father and Puja is Shyam's niece.	**B**
31)	The compound propositions p and q are called logically equivalent if _____ is a tautology. A. p ↔ q B. p → q C. ¬ (p ∨ q) D. ¬p ∨ ¬q	**A**
32)	p ∨ q is logically equivalent to _____ A.¬q → ¬p B.q → p C.¬p → ¬q D.¬p → q	**D**
33)	¬ (p ↔ q) is logically equivalent to _____ A.q↔p B.p↔¬q C.¬p↔¬q D.¬q↔¬p	**B**
34)	p ∧ q is logically equivalent to _____ A.¬ (p → ¬q) B.(p → ¬q) C.(¬p → ¬q) D.(¬p → q)	**A**
35)	Which of the following statement is correct? A.p ∨ q ≡ q ∨ p B.¬(p ∧ q) ≡ ¬p ∨ ¬q C.(p ∨ q) ∨ r ≡ p ∨ (q ∨ r) D.All of mentioned	**D**
36)	p ↔ q is logically equivalent to _____ A.(p → q) → (q → p) B.(p → q) ∨ (q → p) C.(p → q) ∧ (q → p) D.(p ∧ q) → (q ∧ p)	**C**

37)	$(p \rightarrow q) \wedge (p \rightarrow r)$ is logically equivalent to _____ A.$p \rightarrow (q \wedge r)$ B.$p \rightarrow (q \vee r)$ C.$p \wedge (q \vee r)$ D.$p \vee (q \wedge r)$	**A**
38)	$P \rightarrow (Q \rightarrow R)$ is equivalent to a)(P ^Q)-> R b)(P v Q)->R c)(P v Q)-> ⅂R d)None of these	**A**
39)	$\neg (p \leftrightarrow q)$ is logically equivalent to _____ A.$p \leftrightarrow \neg q$ B.$\neg p \leftrightarrow q$ C.$\neg p \leftrightarrow \neg q$ D.$\neg q \leftrightarrow \neg p$	**A**
40)	Let P (x) denote the statement "x >5." Which of these have truth value true? A.P (0) B.P (6) C.P (2) D.P (1)	**B**
41)	Let Q(x) be the statement "x < 5." What is the truth value of the quantification $\forall x Q(x)$, having domains as real numbers. A. True B. False	**B**
42)	Determine the truth value of $\forall n(n + 1 > n)$ if the domain consists of all real numbers. A.True B.False	**A**
43)	A biconditional is symbolized like this… A. p v q B. p↔ q C. p * q D. p ^ q	**B**
44)	Let R (x) denote the statement "x > 2." What is the truth value of the quantification $\exists x R(x)$, having domain as real numbers? A.True B.False	**A**

45)	The symbolization for a conjunction is... A. p → q B. p ∧ q C. p v q D. ~ p	**B**
46)	In a truth table for a two-variable argument, the first guide column has the following truth values: A. T, T, F, F B. F, F, T, T C. T, F, T, F D. T, F, F, F	**A**
47)	Which of the following are tautologies? A. ((P v Q) ^ Q) ↔ Q B. ((P v Q) ^ ⅂P) → Q C. ((P v Q) ^ P) → P D. Both (a) & (b)	**D**
48)	Which of the following propositions is tautology? A. (p v q)→q B. p v (q→p) C. p v (p→q). D. Both (b) & (c)	**C**
49)	Which of the proposition is p^ (~ p v q) is A. A tautology B. A contradiction C. Logically equivalent to p ^ q D. All of above	**C**
50)	”Everyone wants to learn cosmology.” This argument may be true for which domains? A.All students in your cosmology class B.All the cosmology learning students in the world C.Both of the mentioned D.None of the mentioned	**C**
51)	Number of ways in which 7 girls & 7 boys can be arranged such that no two boys and no two girls are together is A. 12!(2!)2 B. 7! 8! C. 2(7!)2 D. None of these	**C**

52)	A _____ is an arrangement of outcomes in which the order does not matter A. Permutation B. Combination C. Both A & B D. None of the above	**A**
53)	How many substrings (of all lengths inclusive) can be formed from a character string of length 8? (Assume all characters to be distinct) A.14 B.21 C.54 D.37	**D**
54)	A _____ is a grouping of outcomes in which the order does not matter E. Permutation F. Combination G. Both A & B H. None of the above	**B**
55)	What is formula of Combinations? A. ${}^{n}C_{r} = n!/ (n-r)!$ B. ${}^{n}C_{r} = n!/ r! (n-r)!$ C. Both A & B D. None of the above	**B**
56)	Let M be a sequence of 9 distinct integers sorted in ascending order. How many distinct pairs of sequences, N and O are there such that i) each are sorted in ascending order, ii) N has 5 and O has 4 elements, and iii) the result of merging N and O gives that sequence? A.84 B.35 C.194 D.138	**A**
57)	The number of ordered triplets (a, b, c), a, b, c $\in$ N, such that a + b + c <= 20 is A. Less than 100 B. Less than 1000 C. Equal to 1000 D. More than 1000	**D**
58)	A polygon has 44 diagonals. The number of its sides is A. 10 B. 11 C. 12 D. 13	**B**

59)	The number of ways in which a mixed doubles tennis game can be arranged between 10 players consisting of 6 men and 4 women is A. 180 B. 90 C. 48 D. 12	**A**
60)	The number of zeroes at the end of (127)! is A. 31 B. 30 C. 0 D. 10	**A**
61)	**Matrix obtained by changing rows and columns is called** A. rectangular matrix B. transpose C. symmetric D. none	**B**
62)	**Generally the elements of a matrix are denoted by** A. numbers B. capital letters C. small letters D. both A and C	**D**
63)	A symmetric matrix is a one in which? A.All diagonal elements are zero B.All diagonal elements are 1 C.$A = A^T$ D.$A = -A^T$	**C**
64)	An anti-symmetric matrix is a one in which? A.All diagonal elements are zero B.All diagonal elements are 1 C.$A = A^T$ D.$A = -A^T$	**D**
65)	**If** $\begin{bmatrix} 2+x & 3 & 4 \\ 1 & -1 & 2 \\ x & 1 & -5 \end{bmatrix}$ **is a singular matrix, then x is** (a) $\frac{13}{25}$ (b) $-\frac{25}{13}$ (c) $\frac{5}{13}$ (d) $\frac{25}{13}$	**B**
66)	If for a square matrix A and B,null matrix O, AB = O implies A=O and B=O. A.True B.False	**B**

67)	**Find the adjoint of the matrix** $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$. (a) $\begin{bmatrix} 4 & 2 \\ 3 & 1 \end{bmatrix}$ (b) $\begin{bmatrix} 4 & -2 \\ -3 & 1 \end{bmatrix}$ (c) $\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$ (d) $\begin{bmatrix} 1 & -2 \\ -3 & 4 \end{bmatrix}$	**B**
68)	If matrix M= [1 3 6 5] and M^T (M transpose) is called A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix	**C**
69)	For a skew symmetric odd ordered matrix A of integers, which of the following will hold true? A.detA.= 9 B.detA.= 81 C.detA.= 0 D.detA.= 4	**C**
70)	The Inverse exist only for non-singular matrices. A.True B.False	**A**
71)	If matrix M= $\begin{bmatrix} 4 & 10 \\ 2 & 5 \end{bmatrix}$ then determinant of matrix M A. 1 B. -1 C. 0 D. 10	**C**
72)	If A is a lower triangular matrix then A^T is a _____ A.Lower triangular matrix B.Upper triangular matrix C.Null matrix D.None of the mentioned	**B**

73)	The functions expressed in form of ratios and form of quotient of polynomials are A. rational functions B. irrational functions C. quotient function D. ratio function	**A**
74)	An onto function are known as injection. A.True B.False	**B**
75)	A function is a relation from a set of inputs to a set of possible outputs where each input is related to exactly one output is called. A. One to one function B. One to many function C. Many to one function D. Many to many function	
76)	function is a relation from a set of inputs to a set of possible outputs where each input is related to exactly one output is called. A. One to one function B. One to many function C. Many to one function D. Many to many function	
77)	If X is domain and Y is codomain then function represented *A.* $f : X \rightarrow Y$ *B.* $f : Y \rightarrow X$ C. Both A & B D. None of the above	
78)	Domain of function also called___ A. Output of function B. Input of function C. Both A & B D. None of the above	**B**
79)	Range of function also called___ A. Output of function B. Input of function C. Both A & B D. None of the above	**A**

80)	May possibly come out of a function is called the A. Domain B. Codomain C. Range D. None of the above	**B**
81)	Actually comes out of a function is called the Range A. Domain B. Codomain C. Range D. None of the above	**C**
82)	$f=cos(x)$is which kind of function A. Even Function B. Odd Function C. Composite Function. D. None of the above	**A**
83)	$f(x) = x/(x^2-1)$ A. Even Function B. Odd Function C. Composite Function. D. None of the above	**B**
84)	$f(x) = a^x$is which of the following is A. Exponential Function B. Rational Function C. Linear Function D. None of the above	**A**
85)	Function having same range as well as domain A. Exponential Function B. Rational Function C. Identity Function D. None of the above	**C**
86)	is a function whose (output) value is the same for every input value A. Constant function B. Rational Function C. Identity Function D. Exponential Function	**A**
87)	If $f(x)=4x^2-2x+5$ then $f(2)$=? A. 7 B. 17 C. 27 D. 37	**B**

88)	The Cartesian system is also called as A.Circular coordinate system B. Rectangular coordinate system C. Spherical coordinate system D. Space coordinate system	**B**
89)	If 2x+y=20 , x+y=10 then values of x & y are A. 5,5 B. 10,5 C. 10,0 D. 0,10	**C**
90)	The scalar factor of Cartesian system is unity. State True/False. A.True B.False	**A**
91)	Which of the following criteria is used to choose a coordinate system? A.Distance B.Intensity C.Magnitude D.Geometry	**D**
92)	The distance of the point P(-2, 6) from the x-axis is A.2 B.-2 C.6 D.-6	**B**
93)	If the coordinates of a point are (10, 0), then it lies in: A. X-axis B. Y-axis C. At origin D. Between x-axis and y-axis	**B**
94)	If the coordinates of a point are (0, -4), then line parallel to : A. X-axis B. Y-axis C. At origin D. Between x-axis and y-axis	**A**
95)	If y coordinate of a point is zero, then the point lies on: A. First quadrant B. Second quadrant C. X-axis D. Y-axis	**D**
96)	**The point P in Cartesian plane is located by an ordered pair called** A. (c, b, a) B. (a, b, c) C. (a, b) D. (b, a)	**C**

97)	Consider equation $x+5y=10$ if $x=0$ then y=? A. 5 B. 10 C. 2 D. 8	**C**
98)	Consider equation $4x+2y=10$ if $x=1$ then y=? A. 6 B. 3 C. 2 D. 7	**B**
99)	The point A(-5,5) is belongs to which Quadrants? A. Ist Quadrant B. IInd Quadrant C. IIIrd Quadrant D. IVth Quadrant	**C**
100)	If value of x is negative and y is negative then it lies on _ A. Ist Quadrant B. IInd Quadrant C. IIIrd Quadrant D. IVth Quadrant	**C**

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	Question Bank of CA-1.5 Essentials of Web Design(254105)	ANS
1)	A program in HTML can be rendered and read by - A) Web browserB) ServerC) InterpreterD) None of the above	A
2)	Gif And Jpg Are The Two Main Types Of What? A) Videos B) Images C) None Of The Above D) Animated Effects	B
3)	HTML tags are surrounded by _____ brackets. A) Square B) Round C) Angle D) Curly	C
4)	Which attribute sets the text direction as related to lang attribute? A) Sub B) Lang C) Dir D) DS	B
5)	Which of the following selector matches an element based on its id? A) The Id Selector B) The Universal Selector C) The Descendant Selector D) The Class Selector	A
6)	In HTML, how many headings are defined? A) h1 to h4 B) h1 to h5 C) h1 to h6 D) h1 to h9	C
7)	From which tag descriptive list starts? A) <LL> B) <DD> C) <DL> D) <DS>	C
8)	Which of the following tag is used to define options in a drop-down selection list? A) <select> B) <list> C) <dropdown> D) <option>	D
9)	How can you open a link in a new browser window? A) < a href = "url" target = "new"> B) <a href = "url" target= "_blank"> C) <a href = "url".new> D) <a href = "url" target ="open">	B

10)	Select the correct HTML syntax for creating a text area? A) <input type="textarea"> B) <input type="textbox"> C) <textarea> D) None of the above	C
11)	Which tag inserts a line horizontally on web page? A) < hr > B) <Line> C) < line irection "Horizontal"> D) <tr>	A
12)	How to insert an image in HTML? A) <imghref = "img.png" /> B) <imgurl = " img.png" /> C) D) <imgsrc = " img.png" />	D
13)	Which HTML tag is used to define an internal style sheet? A) <style> B) <css> C) <script> D) <link>	A
14)	Which attribute is used to start a video automatically? A) submit B) select C) <video> D) autoplay	D
15)	Which HTML tag is used to display the power in expression, i.e., $(x^2 - y^2)$? A) <sup> B) <sub> C) <p> D) None of the above	A
16)	Which of the following element is responsible for making the text italic in HTML? A) <i> B) <italic> C) <it> D) <pre>	A
17)	Apart from <b> tag, what other tag makes text bold ? A) <fat> B) C) <black> D) <emp>	B
18)	which of the following tag is used to mark a begining of paragraph ? A) <TD> B) C) <P> D) <TR>	C

19)	Which is the correct way to comment out something in HTML? A) Using ## and #B) Using <!-- and --> C) Using </-- and -/->D) Using <!-- and -!>	B
20)	Correct HTML tag for the largest heading is A) <head> B) <h6> C) <h1> D) <heading>	C
21)	Which tag creates a Textbox for a form in HTML ? A) <textbox> B) <input type= "text"> C)<input=textbox> D) <input textbox>	B
22)	How can you make a Bulleted list ? A) <dl> B) C) <list> D)	D
23)	The correct sequence of HTML tags for starting a webpage is - A) Head, Title, HTML, bodyB) HTML, Body, Title, Head C) HTML, Title, Body, HeadD) HTML, Head, Title, Body	D
24)	HTML is considered as _____ language A) OOP Language B) Higher Level Language C) Markup Language D) Programming lang	C
25)	Web pages starts with which of the following tag? A) <Body> B) <HTML> C) <Title> D) <Form>	B
26)	Which of the following tag is used to make the underlined text? A) <i> B) C) <u> D) <pre>	C
27)	Which CSS property is used to control the text size of an element ? A) font-size B) text-size C) font-style D) text-style	A
28)	Markup tags tell the web browser A) How to organise the page B) How to display the page C) How to display message box on page D) None of these	B

29)	Which of the following is used to merge rows in the table? A) colB) colspanC) rowspanD) row	C
30)	What is the correct HTML tag for inserting a line break ? A) <lb> B) C) <break> D) <newline>	B
31)	In HTML5, which of the following tag is used to initialize the document type? A) <Doctype HTML>B) <\Doctype html> C) <Doctype>D) <!DOCTYPE html>	D
32)	Which of the following element is responsible for making the text bold in HTML? A) <pre> B) <a> C) <b> D) 	C
33)	Which of the tag is used to creates a number list? A) <LI>B) <OL>C) <UL>D) None of these	B
34)	Which tags can be used to display the audio and video? A) <audio> B) <video> C) both A) & B) D) none of the above	C
35)	How to create a checkbox in HTML? A) <input type = "checkbox"> B) <input type = "button"> C) <checkbox> D) <input type = "check">	A
36)	Correct HTML tag for the smallest heading is A) <head> B) <h6> C) <h1> D) <heading>	B
37)	HTML supports A) ordered lists B) unordered lists C) both type of lists D) does not support list	C
38)	The attribute of <form> tag A) Method B) Action C) Both A) & B) D) None of these	C

39)	What Tag Is used To add an image to HTML Page? A) Picture B) Img C) Src D) Image	B
40)	HTML tags are enclosed in- A) # and # B) { and } C) !and ? D) < and >	D
41)	Which of the following attributes of text box control allow to limit the maximum character? A) size B) len C) maxlength D) all of these	C
42)	What is the correct HTML for adding a background color? A) <background>yellow<Background> B) <body color = "yellow"> C) <body bgcolor = "yellow"> D) <body bg ="yellow">	C
43)	The <hr> tag in HTML is used for - A) new line B) vertical ruler C) new paragraph D) horizontal ruler	D
44)	Which of the following is the correct way to create a list using the lowercase letters? A) <ol alpha = "a" > B) <ol type = "a"> C) <ol letter = "a"> D) None of the above	B
45)	Which of the following tag is used to add rows in the table? A) <td> and </td> B) <th> and </th> C) <tr> and </tr> D) None of the above	C

46)	Which of the following is used to merge columns in the table? A) col B) colspan C) rowspan D) row	B
47)	Which of the following attribute is used to provide a unique name to an element? A) class B) id C) type D) None of the above	B
48)	Which attribute is used to define inline css A) script B) action C) style D) form	C
49)	Which of the following tag is used to add column headings in the table? A) <td> and </td> B) <th> and </th> C) <tr> and </tr> D) None of the above	B
50)	Main container for <TR>, <TD> and <TH> is A) <TABLE> B) <GROUP> C) <DATA> D) All of these	A
51)	What are the types of unordered or bulleted list in HTML? A) disc, square, triangle B) polygon, triangle, circle C) disc, circle, square D) All of the above	C
52)	How can you make an e-mail link? A) <mail href +"xxx@y.com"> B) <a href ="mail to: xxx@y.com"> C) <a href = "xxx@y.com"> D) Both (B) and (C)	B
53)	Which of the following tag is used to create a drop-down list? A) <select> B) <list> C) <dropdown> D) <option>	A

54)	Correct HTML to left align the content inside a table cell is A) <tdleft> B) <td raligh = "left" > C) <td align = "left"> D) <td leftalign>	C
55)	Which of the following is the correct way to start an ordered list with the count of numeric value 4? A) <ol type = "1" initial = "4"> B) <ol type = "1" begin = "4"> C) <ol type = "1" num = "4"> D) <ol type = "1" start = "4">	D
56)	There are ____ different of heading tags in HTML A) 4 B) 5 C) 6 D) 7	C
57)	How can you created rounded corners using CSS3? A) border[round]: 30px; B) corner-effect: round; C) border-radius: 30px; D) alpha-effect: round-corner;	C
58)	Which of the following tag is used to add column in the table? A) <td> and </td> B) <th> and </th> C) <tr> and </tr> D) None of the above	A
59)	An HTML program is saved by using the ____ extension. A) .ht B) .html C) .hml D) None of the above	B
60)	Which of the following is an attribute of <Table> tag? A) SRC B) LINK C) CELLPADDING D) BOLD	C

61)	Which of the following is not a valid CSS unit? A) ptB) pxC) pixD) cm	C
62)	The body tag usually used after A) Title tag B) HEAD tag C) EM tag D) FORM tag	B
63)	Increasing Cell padding means? A) increase softness of your site B) increase space between cell C) increase the distance between cell and content D) none of the above	
64)	The tags in HTML are - A) case-sensitive B) in upper case C) not case sensitive D) in lowercase	C
65)	Which of the following is the root tag of the HTML document? A) <body>B) <head>C) <title>D) <html>	D
66)	Which Of The Following Is A Declaration For An HTML Document? A) <html>.....</html> B) <!DOCTYPE Html> C) <body>.....</body> D)	B
67)	In css what does “font-size” can be called as A) SelectorB) Property-Name C) Value D) Tag	B

68)	HTML Links Are Defined With <a> Tag And Address Is Specified By Attribute A) Href B) Hlink C) Src D) Src-link	A
69)	Which of the following is / are the state of the links in CSS? A) a:visited B) a:hover C) a:active D) All of the above.	D
70)	Which element of the text type shows that it is important? A) B) C) <sup> D) Both A) & B)	D
71)	Which attribute is use to merge two cells horizontally? A) merge B) colspan C) rowspan D) horizontal	B
72)	What does CSS stand for? A) Creative Style Sheets B) Colorful Style Sheets C) Cascading Style Sheets D) Computer Style Sheets	C
73)	Pick the odd one out. A) Table B) TR C) TD D) TS	D
74)	Which of the following attributes is used to open a hyperlink in new tab? A) tab B) href C) target D) ref	C
75)	Which property is used in css to change the background color? A) background-color B) color C)bgcolor D)back-color	A

76)	What does vlink attribute mean? A) visited link B) virtual link C) very good link D) active link	A
77)	Which of the following is a correct character entity for "copyright" symbol? A) © B) Ccopy; C) &copyright; D) &c;	A
78)	Which of the following is an attribute related to font tag? A) size B) face C) color D) All of the above	D
79)	If we want to use a nice looking green dotted border around an image, which css property will we use? A) border-color B) border-decoration C) border-style D) border-line	C
80)	When we write <imgsrc="img.png">, what "img.png" inside double quote implies? A) element B) attribute C) value D) operator	C
81)	The default value of "position" attribute is _____. A) fixed B) absolute C) inherit D) relative	D
82)	Which of the following property sets the width of an element's complete border? A) border-width B) width C) border-depth D) none of the above	
83)	In CSS what does H1 can be called as ? A) Selector B) Attribute C) Value D) Tag	A

84)	If we want define style for an unique element, then which css selector will we use ? A) Id B) text C) class D) name	A
85)	_____ selectors, which are used to specify a group of elements A) id B) class C) tag D) None of the above	B
86)	Where in an HTML document is the correct place to refer to an external stylesheet? A) <head> B)Body C) <form> D) <script>	A
87)	Which tag is used to define internal style sheet A) <script > B) <head> C) <style> D) <form>	C
88)	Which tag supports CSS code between its opening and closing tag? A) < div > ... < /div > B) <css> ... < /css> C) < style > ... < /style > D) < link > ... < /link >	C
89)	As a general rule, properties in CSS inherit from _____ elements A) child to parent B) parent to child C) grandparents to parents D) none of the above	B
90)	Which CSS property lets you adjust the size of the text? A) text-size B) font-size C) display-size D) None of the given.	B
91)	Which of the following selector matches all elements of a type? A) The Type Selector B) The Universal Selector C) The Descendant Selector D) The Class Selector	B
92)	How can you make a bulleted list with numbers? A) <dl> B) C) <list> D.	D

93)	Which of the attribute is used to add video controls like play , pause and volume in video A) autoplay B) Controls C) Video Ctrl D) Play	B
94)	Which of the following property is used to control the space between the border and content in a table? A) border B) margin C) padding D) resize	C
95)	Which of the following uses of the tag is correct? A) < link rel="stylesheet" href="css/my_styles.css" > B) < link rel="stylesheet" src="css/my_styles.css" > C) < link rel="css" > D) < link href="css/my_styles.css" >	A
96)	What is CSS? A) Used to customize a page for each user B) A subset of HTML C) Used to control what a page looks like D) None of the given.	C
97)	Which CSS property allows you to control the spacing between html items? A) spacingB) paddingC) marginD) None of the given.	C
98)	If you wanted to move a banner to the right instead of the left, which of these would you set? A)margin-bottom: B) margin-left: C) margin-top: D) margin-right:	B
99)	HTML stands for? A) Hyper Text Markup Language B) High Text Markup Language C) Hyper Tabular Markup Language D) None of these	A
100)	Which character is used to represent the closing of a tag in HTML? A) \ B) ! C) / D) *	C

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	Question Bank of CA-5.1 Web UI Design(254501)	ANS
1)	How to get a particular value using the tagged name? A)getElementbyID() B)getElementsbyName() C)getElementsbyTagName() D)getTagName()	C
2)	Which company developed JavaScript? A) Bell Labs B) Netscape C) Sun Microsystems D) IBM	B
3)	What are the types of Pop up boxes available in JavaScript? A) AlertB) PromptC) ConfirmD) All of the above	D
4)	Choose the correct JavaScript syntax to change the content of the following HTML code. A)document.getElement (“test").innerHTML = "I am a test"; B)document.getId (“test") = "I am a test"; C)document.getElementById (“test").innerHTML = "I am a test"; D)documents.getElementByIds (“test").innerHTML = I am a test;	C
5)	JavaScript is _____language A) Programming B) Application C) Scripting D) system	C
6)	Which of them is not the looping structures in JavaScript? A) forB) whileC)forwhichD)dowhile	C
7)	With jQuery, look at the following selector: $("div"). What does it select? A) All div elements B) The first div element C) The last div element D) none of above	A

8)	The speed options can be applied to which jQuery functions? A) css and ajax B) show and fadeIn C) toggleCss D) All of the above	B
9)	Which property is used to specify the key type when pressed? A) keyCodeB) keyTypeC) keyNameD) keyProperty	A
10)	Which event can be fired on any scrollable document element? A) WindowB) ScrollC) LoadD) Unload	B
11)	What is mean by "this" keyword in javascript? A) It refers current object B) It refers previous object C) It is variable which contains value D) None of the above	A
12)	In general, event handler is nothing but _____ A) functionB) interfaceC) eventD) handler	A
13)	The var statement is used to: A) Create a new local variable B) Retrieve a variable descriptor C) Declare a member of a class D) Change a constant	A
14)	BOM stands for _____ A) Binary object modeB) Browser object model C) Binary Object modellingD) none of the above	B
15)	$(“P:first”).hide() will hide A) All Paragraphs B) First Paragraph C) Last ParagraphD) None	B
16)	Which of the following is a Jquery UI Effect A) ResizableB) Show C) DroppableD) Hidden	B

17)	Which of the following is not the property of screen objects in JavaScript? A)AvailHeightB)ColorsDepthC)AvailWidthD)ColorDepth	B
18)	$(“span.intro”). What does it select? A) The first span element with class=”intro” B) The first span element with id=”intro” C) All span elements with id=”intro” D) All span elements with class=”intro”	D
19)	Which method is used to add a binding? A) binding()B) add_bind() C) bind()D) addbind()	C
20)	How do you declare a JavaScript variable? A) variable carName; B) v carName; C) varcarName;D) char[20] carName	C
21)	What does the “min” mean in jquery.min.js? A) Minimised versionB) Miniature C) Minimised parametersD) Minimum value	A
22)	What is the alternate name for Java script? A)LimeScriptB)vbscriptC)ECAMScriptD) ECMAScript	D
23)	$(“P”).action() What type of selector is used in the above jQuery syntax? A)id selectorB)class selector C)element selectorD)value selector	C
24)	JavaScript is an implementation of the _____ language standard A) VBScriptB) ActionScriptC) ECMAScriptD) HTML	C
25)	Which jQuery method is used to set one or more style properties for selected elements? A)css() B) html() C) style()D) animate()	A

26)	What does the <noscript> tag do? A) Enclose text to be displayed by non-JavaScript browsers. B) Prevents scripts on the page from executing. C) Describes certain low-budget movies. D) None of the above	A
27)	_____ tag is an extension to HTML that can enclose any number of JavaScript statements. A)<SCRIPT>B)<BODY>C)<HEAD>D)<TITLE>	A
28)	JavaScript is interpreted by _____ A) ClientB) ServerC) ObjectD) None of the above	A
29)	Which jQuery method is used to hide selected elements? A) hidden() B) hide() C) visible(false) D) display(none)	B
30)	Which of the following are not key event properties? A) Code keyB) Alt KeyC) Ctrl KeyD) Shift Key	A
31)	How do you read the first character in a string? A) data.charAt(0); B) data.slice(1) C) data.substr(0); D) data.charAt(1);	A
32)	Which of the following attribute can hold the JavaScript version? A) LANGUAGEB) SCRIPTC) VERSIOND) None of the above	A
33)	What is the correct syntax for referring to an external script called "abc.js"? A)<script href=" abc.js"> B)<script name=" abc.js"> C)<script src=" abc.js"> D) None of the above	C
34)	Which event fires whenever a control loses focus? A) onclickB) onmoveC) onblurD) onchange	C

35)	With jQuery, look at the following selector: $("div.intro"). What does it select? A) The first div element with class="intro" B) The first div element with id="intro" C) All div elements with class="intro" D) All div elements with id="intro"	C
36)	Which statement is true? A) All the statements are true B) All XML elements must have a closing tag C) All XML elements must be lower case D) All XML documents must have a DTD	B
37)	Java script start with…… A) Do_script B) Start_script C) <script> D) <scr>	C
38)	How do you write “Hello World” in an alert box? A) msgbox(“Hello World”); B) alertbox(“Hello World”); C)alert(“Hello World”); D) msg(“Hello World”);	C
39)	What character combination is used to create a single line comment? A) !! B) — C) $$ D) //	D
40)	What character ends a javascript statement? A) An exclamation mark “!”. B) A semicolon “;”. C) A period “.”. D) A colon “:”.	B

41)	Which of the following Attribute is used to include External JS code inside your HTML Document A) srcB) extC) scriptD) link	A
42)	Which of the following primitive values exist in JavaScript? A) Boolean B) stringC) numberD) All of the above	D
43)	What is the correct JavaScript syntax to write "Hello World"? A) System.out.println("Hello World") B) println ("Hello World") C) document.write("Hello World") D) response.write("Hello World")	C
44)	Which function need to use for toggling fade ? A) fadeToggleB) fadeInC) fadeoutD)Toggle	A
45)	What keyword is used to begin a conditional statement? A) whenB) howC) ifD) condition	C

46)	What is the correct JavaScript syntax to insert a comment that can span multiple lines?
	A) // This comment has mor than one line *//
	B) / This comment has more than one line /
	C) // This comment has more than one line //
	D) /* This comment has more than one line */
		D

47)	How do you define a function called “fName”? A) function fName: { } B) funcfName = function () {} C) function fName() { } D) new fName = { }	C
48)	To which object does the location property belong? A) WindowB) PositionC) ElementD) Location	A
49)	Which among the following is not a property of the Location object? A) protocolB) hostC) hosteeD) hostname	C

50)	How to write your own plug-in using jquery? A)jQuery.fn.methodName = methodDefinition; B)jQuery.Stylesheet= methodDefinition; C)jQuery.functions.method = methodDefinition; D)jQuery.Stylesheet.function = methodDefinition;	A
51)	In an array object, what is the key of the first value? A) 0B) 2C) 1D) -1	A
52)	$.foo() is equivalent to.. A) javascript.foo()B) document.foo() C) jQuery.foo()D) None of the above	C
53)	The type that specifies what kind of event occurred is _____ A) event typeB) even target C) both event type and even targetD) interface	A
54)	The focus and blur events are also part of _____ A) Element eventsB) Handler events C) Window eventsD) Scroll events	C
55)	$(‘.temp’).action() What type of selector is used in the above jQuery syntax? A)id selectorB)class selector C)name selectorD)value selector	B
56)	jQuery code to set the background color of all span elements to blue? A) $(“span”).style(“background-color”,”blue”); B) $(“span”).manipulate(“background-color”,”blue”); C) $(“span”).css(“background-color”,”blue”); D) $(“span”).layout(“background-color”,”blue”);	C
57)	Which jQuery method is used to switch between adding/removing one or more classes (for CSS) from selected elements? A) toggleClass()B) switch() C) altClass()D) switchClass()	D

58)	What are the various speed options? A) The words "slow" and "fast" as well as integers for the milliseconds B) Only the words "slow", "fast", and "medium" C) All of the above D) None of the above	A
59)	Which is the opposite of the load event in JavaScript? A) dontloadB) postload C) preloadD) unload	D
60)	Which sign does jQuery use as a shortcut for jQuery? A) $ signB) % signC) ? SignD) None	A
61)	What is the value of ("cat".length)? A) 4B) 3C 1D) 2	B
62)	$("span") what does it selects? A) All span elementsB)First span element C)Last span elementD)None of above	A
63)	Which built in method returns length of string? A) Size()B) Index() C) Length()D) None of above	C
64)	What is the correct syntax of the declaration which defines the XML version?: A) <xml version="1.0" /> B) <?xml version="1.0"?> C) <?xml version="1.0" /> D) None of the above	B
65)	$("#temp").action() What type of selector is used in the above jQuery syntax? A)id selector B)class selector C)name selector D)value selector	A
66)	What scripting language is jQuery written in? A) VBScriptB) JavaScriptC) C#D) C++	B

67)	Which of the following is not a Jquery UI interaction A) DraggableB) SortableC) ResizableD) Viewable	D
68)	What does XML stand for? A) eXtra Modern Link B) eXtensibleMarkup Language C) Example Markup Language D) X-Markup Language	B
69)	Comment in XML document is given by A) <?----> B) <!----!> C) <!----> D) </---- >	C
70)	Which of the following is/are the sources of Content Distribution Network(CDN) for jQuery. A) jQuery CDNB) Microsoft CDN C) Google CDND) All of the above	D
71)	Which of the following specifies the property of the event? A) TypeB) Target_Type C) MannerD) Program	A
72)	Which of the following is not a Jquery UI Effect A) HideB) ShowC) ToggleD) Hidden	D
73)	The process by which the browser decides which objects to trigger event handlers on is _____ A) Event TriggeringB) Event Listening C) Event HandlingD) Event propagation	D
74)	Inside which HTML element do we put the JavaScript? A) <js>B) <scripting>C) <script>D) <javascript>	C

75)	When is the mouseout event fired? A) When mouse is no longer over an element B) When mouse is over an element C) When mouse is hovered D) When mouse is clicked	A
76)	What does DTD stand for? A) Direct Type Definition B) Document Type Definition C) Do The Dance D) Dynamic Type Definition	B
77)	Which jQuery method is used to perform an asynchronous HTTP request? A) jQuery.ajaxAsync()B) jQuery.ajax() C) jQuery.ajaxSetup()D) jQuery.ajaxStartup()	B
78)	Which of the following strings are a correct XML name? A) _myElementB) my Element C) #myElementD) None of the above	A
79)	Which jQuery function is used to prevent code from running, before the document is finished loading? A) $(document).load()B) $(document).ready() C) $(body).onload()D) $(body).unload()	C
80)	Which of the following Node object property returns the node immediately before a node? A) previousSiblingB) textContentC) indexD) localName	A
81)	How many node types are there in total? A) 11B) 12C) 13D) 14	B
82)	If you want to stop your jQuery for a few milliseconds, which function do you use? A) stop()B) pause()C) slowdown()D) delay()	D
83)	Which event is fired when a document and all of its external resources are fully loaded and displayed to the user? A) WindowB) LoadC) ElementD) Handler	B

84)	Load remote data using HTTP GET A) $.get(url,data,callback,type) B) $.ajax(options) C) $.post(url,data,callback,type) D) $.getScript(url,callback)	A
85)	The URL property belongs to which of the following object? A) DocumentB) ElementC) LocationD) Event	A
86)	What operator is used for string concatenation? A) *B) +C) &D) All of the above	B
87)	The properties that specify the position and button state of the mouse are _____ A) clientX and client B) clientY and clientX C) altKey and ctrlKeyD) metaKey and shiftKey	A
88)	jQuery's main focus is.. A) AJAXB) DOM Manipulation C) AnimationsD) All of the above	D
89)	When are the keyboard events fired? A) When the user manually calls the button B) When the user clicks a key C) When the user calls the modifier D) When the user right clicks the mouse	B
90)	jQuery is a A) JavaScript Library. B)JavaScript Language C)JavaScript Method D) PHP Method	A
91)	Which is the object on which the event occurred or with which the event is associated? A) event typeB) event target C) both event type and even targetD) interface	B
92)	Which of the following event fires when the form element loses the focus: <button>, <input>, <label>, <select>, <textarea>? A) onfocusB) onblurC) onclickD) ondblclick	B

93)	Xslt stands for A)eXtensible Stylesheet Language transformation B)eXtra Stylesheet Language transform C)eXtended Style Language transformation D)eX Stylesheet Language transform	A
94)	Which of the following way can be used to indicate the LANGUAGE attribute? A) <LANGUAGE="JavaScriptVersion"> B) <SCRIPT LANGUAGE="JavaScriptVersion"> C) <SCRIPT LANGUAGE="JavaScriptVersion"> JavaScript statements…</SCRIPT> D) <SCRIPT LANGUAGE="JavaScriptVersion"!> JavaScript statements…</SCRIPT>	C
95)	What are the predefined attributes A) xml:langB) xml:spaceC) both A) and B)D) none.	C
96)	What does the function $(“.selector”) return? A) An array.B) A node list. C) A new jQuery object.D) None of the above	C
97)	Inside which HTML tag do we put javascript A) <js> B) <scripting> C) <javascript> D) <script>	D
98)	varps = $("p");ps will be.. A) A linked listB) A hash or dictionary C) An arrayD) A jQuery object	D
99)	$(“*”).action() What type of selector is used in the above jQuery syntax? A)id selectorB)class selector C)name selectorD)Universal selector	D
100)	DOM is _____ A) Duplicate object modeB) Document object model C) Doc Object modellingD) none of the above	B

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Sr. No.	**Question Bank of** **CA 5.2 Theoretical Computer Science(254502)**	ANS
1)	Which of the following is true? a) Every subset of a regular set is regular b) Every finite subset of non-regular set is regular c) The union of two non-regular set is not regular d) Infinite union of finite set is regular	b)
2)	If L1 = {x | x is a palindrome in (0 + 1)*} L2 = {letter (letter + digit)* }; L3 = (0n 1n 2n | n > 1} L4 = {ambnam+n | m, n > 1} then which of the following statement is correct ? a) L1 is context free language and L3 is context sensitive language b) L2 is a regular set and L4 is not a context free language c) Both L1 and L2 are regular sets d) Both L3 and L4 are context-sensitive languages	a)
3)	L = {aP | p ; } is prime is a) regular b) not regular c) accepted by DFA d) accepted by PDA	b)
4)	Regular expression are a) Type 0 language b) Type 1 language c) Type 2 language d) Type 3 language	a)
5)	Which of the technique can be used to prove that a language is non regular? a) Ardens theorem b) Ogden's Lemma c) Pumping Lemma d) None of the mentioned	c)

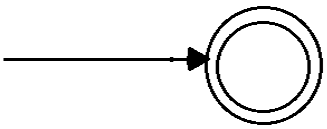
6)	Following context free grammar S —> aB | bA A —>b | aS | bAA B —> b | bS | aBB generates strings of terminals that have a) equal number of a's and b's b) odd number of a's and odd number b's c) even number of a's and even number of b's d) d. odd number of a's and even number of a's	a)
7)	Which of the following is not true? a. Power of deterministic automata is equivalent to power of non-deterministic automata. b. Power of deterministic pushdown automata is equivalent to power of non-deterministic pushdown automata. c. Power of deterministic Turing machine is equivalent to power of non-deterministic Turing machine. d. All the above	b)
8)	Identify the language which is not context - free. a. L = {ωωR|ω∈{0,1}*} b. L = {a^nb^n|n≥0} c. L = {ωω|ω∈{0,1}*} d. L = {a^nb^mc^md^n | n, m≥0 }	b.
9)	The context-free languages are closed for: (i) Intersection (ii) Union (iii) Complementation (iv) Kleene Star a. (i) and (iv) b. (i) and (iii) c. (ii) and (iv) d. (ii) and (iii)	c.

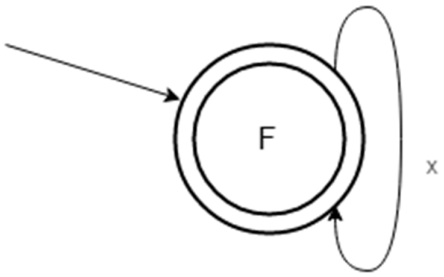
10)	Grammars that can be translated to DFAs: a. Right linear grammar b. Left linear grammar c. Generic grammar d. All of these	a.
11)	The language accepted by a Push down Automata: a. Type0 b. Type1 c. Type2 d. Type3	c.
12)	Consider the following two languages: L1 = {x | for some y with |y| = 2^|x|,xy ∈ L and L is regular language} L2 = {x | for some y such that |x| = |y|, xy ∈ L and L is regular language} Which one of the following is correct? a. Only L1 is regular language b. Only L2 is regular language c. Both L1 and L2 are regular languages d. Both L1 and L2 are not regular languages	c.

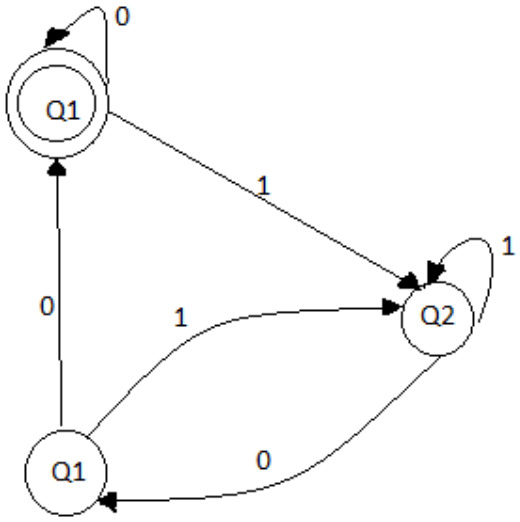
13)	Palindromes can't be recognized by any FSM because a. FSM can't remember arbitrarily large of information b. FSM can't deterministically fix the mid-point c. even if mid-point is known, FSM be can't be found whether, second half of the string matches the first half d. all of these	d
14)	To obtain a string of n Terminals from a given Chomsky normal form grammar, the number of productions to be used is: a. 2n−1 b. 2n c. n+1 d. n^2	a.
15)	Consider the following two Grammars: G1 : S → SbS | a G2 : S → aB | ab, A→GAB | a, B→ABb | b Which of the following option is correct? a. Only G1 is ambiguous b. Only G2 is ambiguous c. Both G1 and G2 are ambiguous d. Both G1 and G2 are not ambiguous	c.
16)	Context sensitive language can be recognized by a: a. Finite state machine b. Deterministic finite automata c. Non-deterministic finite automata d. Linear bounded automata	d.

17)	The set A={ 0^n 1^n 2^n | n=1, 2, 3, ... } is an example of a grammar that is: a. Context sensitive b. Context free c. Regular d. None of the above	a.
18)	Regular expression a / b denotes the set a. {a} b. { ∈ , a, b } c. {a, b} d. { ab }	c.
19)	Which of the following is true? a) Every subset of a regular set is regular b) Every finite subset of non-regular set is regular c) The union of two non-regular set is not regular d) Infinite union of finite set is regular	b)
20)	A push down automaton employs _____ data structure. a) Queue b) Linked List c) Hash Table d) Stack	d)
21)	State true or false: Statement: The operations of PDA never work on elements, other than the top. a) true b) false	a)
22)	Which of the operations are eligible in PDA? a) Push b) Delete c) Insert d) Find	a)

23)	Write the regular expression to denote the language L over ? = { a,b} such that all the string do not contain the substring " ab". a) a*b* b) b*a* c) (ab)* d) (ba)*	b)
24)	The following move of a PDA is on the basis of: a) Present state b) Input Symbol c) Both (a) and (b) d) None of the mentioned	c)
25)	Which of the following was not a part of Chomsky hierarchy? a) Context sensitive grammar b) Unrestricted grammar c) Recursive grammar d) None of the mentioned	c)
26)	Assume the R is a relation on a set A, aRb is partially ordered such that a and b are _____ a) reflexive b) transitive c) symmetric d) reflexive and transitive	d)
27)	Recognize the CFL for the given CFG. S-> aB| bA, A-> a|aS|bAA, B-> b|bS|aBB a) Strings contain equal number of a's and equal number of b's. b) Strings contain odd number of a's and odd number of b's. c) Strings contain odd number of a's and even number of b's. d) Strings contain even number of a's and even number of b's.	a.
28)	Moore Machine is an application of: a) Finite automata without input b) Finite automata with output c) Non- Finite automata with output d) None of the mentioned	b.

29)	In Moore machine, output is produced over the change of: a) states b)transitions c) Both d) None of the mentioned	a.
30)	FSM shown in the figure  a. all strings b. no string c. ε- alone d. none of these	c.
31)	Which of the following is a correct statement? a) Moore machine has no accepting states b) Mealy machine has accepting states c) We can convert Mealy to Moore but not vice versa d) All of the mentioned	a.
32)	In mealy machine, the O/P depends upon? a) State b) Previous State c) State and Input d) Only Input	c.
33)	Which of the given are correct? a) Moore machine has 6-tuples b) Mealy machine has 6-tuples c) Both Mealy and Moore has 6-tuples d) None of the mentioned	c.
34)	The major difference between Mealy and Moore machine is about: a) Output Variations b) Input Variations c) Both d) None of the mentioned	a.

35)	Mealy and Moore machine can be categorized as: a) Inducers b) Transducers c) Turing Machines d) Linearly Bounder Automata	b.
36)	Which one among the following is true? A mealy machine a) produces a language b) produces a grammar c) can be converted to NFA d) has less circuit delays	d.
37)	When are 2 finite states equivalent? a) Same number of transitions b) Same number of states c) Same number of states as well as transitions d) Both are final states	c.
38)	What does the following figure most correctly represents?  a) Final state with loop x b) Transitional state with loop x c) Initial state as well as final state with loop x d) Insufficient Data	c.

39)	Regular expression corresponding to the state diagram given in the figure is  a. (0+1(1 + 01)* 00)* b. (1 + 0 (0 + 10) 00)* c. (0 + 1 (1 + 10) 00)* d. (1 + 0(1 + 00) 11)*	a.
40)	The language which is generated by the grammar S-> aSa / bSb / a / b over the alphabet {a, b} is the set of a. Strings that begin and end with the same symbol b. All odd and even length palindromes c. All odd length palindromes d. All even length palindromes	c.
41)	Which of the following is not an example of finite state machine system? a. Control Mechanism of an elevator b. Combinational Locks c. Traffic Lights d. Digital Watches	d.

42)	Given: L= {x∈∑= {0,1} |x=0n1n for n>=1}; Can there be a DFA possible for the language? a) Yes b) No	b.
43)	There are _____ tuples in finite state machine. a) 4 b) 5 c) 6 d) unlimited	b.
44)	Transition function maps. a) Σ * Q -> Σ b) Q * Q -> Σ c) Σ * Σ -> Q d) Q * Σ -> Q	d.
45)	Consider the regular expression 0 * (10 *) which is similar to the same set as a. 0 + (0 + 10) * b. (0 +1) * 10 (0 + 1) * c. (1 * 0) * 1* d. None of the above	d.
46)	Finite automata requires minimum _____ number of stacks. a. 1 b. 0 c. 2 d. None of the mentioned	b.
47)	Which one of the following is true for the language {am bn c m+n I m, n≥1}? a. It is context-free but not regular b. It is regular c. It is type-0 but not context-sensitive d. It is context-sensitive but not context-free	b.
48)	Regular expression for all strings starts with ab and ends with bba is. a. aba*b*bba b. ab(ab)*bba c. ab(a+b)*bba d. All of the mentioned	c.

49)	The basic limitation of finite automata is that a. It can't remember arbitrary large amount of information. b. It sometimes recognize grammar that are not regular. c. It sometimes fails to recognize regular grammar. d. All of the mentioned	a.
50)	Predict the number of transitions required to automate the following language using only 3 states: L= {w | w ends with 00} a. 3 b. 2 c. 4 d. Cannot be said	a.
51)	Reverse of a DFA can be formed by a. using PDA b. making final state as non-final c. making final as starting state and starting state as final state d. None of the mentioned	c.
52)	Concatenation of R with Φ outputs: a) R b) Φ c) R.Φ d) None of the mentioned	b.
53)	Simplify the following regular expression: ε+1*(011) *(1*(011) *) * a. (1+011) * b. (1*(011) *) c. (1+(011) *) * d. (1011) *	a.
54)	P, O, R be regular expression over ∑, P is not ε, then R=Q + RP has a unique solution: a) Q*P b) QP* c) Q*P* d) (P*O*) *	b.

55)	If two finite state machines are equivalent, they should have the same number of a. states b. edges c. states and edges d. none of these	d.
56)	The difference between number of states with regular expression (a + b) and (a + b) * is: a) 1 b) 2 c) 3 d) 0	a.
57)	In order to represent a regular expression, the first step to create the transition diagram is: a) Create the NFA using Null moves b) Null moves are not acceptable, thus should not be used c) Predict the number of states to be used in order to construct the Regular expression d) None of the mentioned	a.
58)	Regular Expression denote precisely the _____ of Regular Language. a) Class b) Power Set c) Super Set d) None of the mentioned	a.
59)	Relate the following statement: Statement: All sufficiently long words in a regular language can have a middle section of words repeated a number of times to produce a new word which also lies within the same language. a) Turing Machine b) Pumping Lemma c) Arden's theorem d) None of the mentioned	b.
60)	While applying Pumping lemma over a language, we consider a string w that belong to L and fragment it into _____ parts. a) 2 b) 5 c) 3 d) 6	c.

61)	If we select a string w such that w∈L, and w=xyz. Which of the following portions cannot be an empty string? a) x b) y c) z d) all of the mentioned	b.
62)	There exists a language L. We define a string w such that w∈L and w=xyz and |w| >=n for some constant integer n.What can be the maximum length of the substring xy i.e. |xy|<=? a) n b) |y| c) |x| d) none of the mentioned	a.
63)	Answer in accordance to the third and last statement in pumping lemma: For all _____ $xy^iz \in L$ a) i>0 b) i<0 c) i<=0 d) i>=0	d.
64)	Let w be a string and fragmented by three variable x, y, and z as per pumping lemma. What does these variables represent? a) string count b) string c) both (a) and (b) d) none of the mentioned	a.
65)	Regular expression (a | b) (a | b) denotes the set a. { a, b, ab, aa } b. { a, b, ba, bb } c. { a, b } d. { aa, ab, ba, bb }	d.
66)	The language of balanced paranthesis is a) regular b) non regular c) may be regular d) none of the mentioned	b.

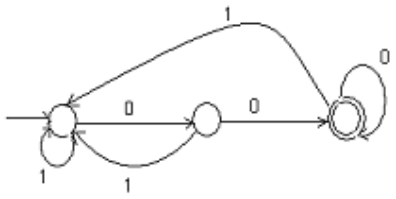
67)	The entity which generate Language is termed as: a) Automata b) Tokens c) Grammar d) Data	c.
68)	Production Rule: aAb->agb belongs to which of the following category? a) Regular Language b) Context free Language c) Context Sensitive Language d) Recursively Ennumerable Language	c.
69)	The Grammar can be defined as: G=(V, ∑, p, S) In the given definition, what does S represents? a) Accepting State b) Starting Variable c) Sensitive Grammar d) None of these	b.
70)	Which among the following cannot be accepted by a regular grammar? a) L is a set of numbers divisible by 2 b) L is a set of binary complement c) L is a set of string with odd number of 0 d) L is a set of 0^n1^n	d.
71)	Which is not the correct statement(s) ? (i) Every context sensitive language is recursive. (ii) There is a recursive language that is not context sensitive. a. (i) is true, (ii) is false b. (i) is true and (ii) is true c. (i) is false, (ii) is false d. (i) is false and (ii) is true	b.
72)	Which of the following statement is correct? a. All Regular grammar are context free but not vice versa b. All context free grammar are regular grammar but not vice versa c. Regular grammar and context free grammar are the same entity d. None of the mentioned	a.
73)	Are ambiguous grammar context free? a. Yes b. No	a.

74)	A->aA| a| b The number of steps to form aab: a. 2 b. 3 c. 4 d. 5	b.
75)	Which of the following the given language belongs to? L={$a^m b^m c^m$| m>=1} a) Context free language b) Regular language c) Both (a) and (b) d) None of the mentioned	d
76)	Which among the following is the correct option for the given grammar? G->X111|G1,X->X0|00 a) {$0^a 1^b$|a=2,b=3} b) {$0^a 1^b$|a=1,b=5} c) {$0^a 1^b$|a=b} d) More than one of the mentioned is correct	a
77)	Which one of the following is not a Greibach Normal form grammar? (i) S ->a|bA|aA|bB A->a B->b (ii) S->a|aA|AB A->a B->b (iii) S->a|A|aA A->a a. (i) and (ii) b. (i) and (iii) c. (ii) and (iii) d. (i), (ii) and (iii)	c.

78)	Which of the following statement is false in context of tree terminology? a. Root with no children is called a leaf b. A node can have three children c. Root has no parent d. Trees are collection of nodes, with a parent child relationship	a.
79)	For the expression E*(E) where * and brackets are the operation, number of nodes in the respective parse tree are: a. 6 b. 7 c. 5 d. 2	b.
80)	The number of leaves in a parse tree with expression E*(E) where * and () are operators a. 5 b. 2 c. 4 d. 3	a.
81)	Context sensitive language can be recognized by a: a. Finite state machine b. Deterministic finite automata c. Non-deterministic finite automata d. Linear bounded automata	d.
82)	_____ is the acyclic graphical representation of a grammar. a. Binary tree b. Oct tree c. Parse tree d. None of the mentioned	c.
83)	Which of the following is false for a grammar G in Chomsky Normal Form: a. G has no useless symbols b. G has no unit productions c. G has no epsilon productions d. None of the mentioned	d.
84)	A CFG is ambiguous if a. It has more than one rightmost derivations b. It has more than one leftmost derivations c. No parse tree can be generated for the CFG d. None of the mentioned	b.

85)	A null production can be referred to as: a. String b. Symbol c. Word d. All of the mentioned	a.
86)	NPDA stands for a. Non-Deterministic Push Down Automata b. Null-Push Down Automata c. Nested Push Down Automata d. All of the mentioned	a.
87)	The format: A->aB refers to which of the following? a. Chomsky Normal Form b. Greibach Normal Form c. Backus Naur Form d. None of the mentioned	b.
88)	Which of the production rule can be accepted by Chomsky grammar? a) A->BC b) A->a c) S->e d) All of the mentioned	d.
89)	Every grammar in Chomsky Normal Form is: a) regular b) context sensitive c) context free d) all of the mentioned	c.
90)	Let G be a grammar: S->AB|e, A->a, B->b Is the given grammar in CNF? a) Yes b) No	a
91)	Given grammar G: (1)S->AS (2)S->AAS (3)A->SA (4)A->aa Which of the following productions denies the format of Chomsky Normal Form? a) 2,4 b) 1,3 c) 1, 2, 3, 4 d) 2, 3, 4	a

92)	Which of the following grammars are in Chomsky Normal Form: a) S->AB|BC|CD, A->0, B->1, C->2, D->3 b) S->AB, S->BCA|0|1|2|3 c) S->ABa, A->aab, B->Ac d) All of the mentioned	a.
93)	The variable which produces an epsilon is called: a) empty variable b) nullable c) terminal d) all of the mentioned	b.
94)	Let G=(V, T, P, S) be a CFG such that _____. Then there exists an equivalent grammar G' having no e productions. a) e ∈ L(G) b) w ∉ L(G) c) e ∉ L(G) d) w ∈ L(G)	c.
95)	Which among the following is the format of unit production? a) A->B b) A->b c) B->Aa d) None of the mentioned	a
96)	Given Grammar G: S->aA A->a| A B->B The number of productions to be removed immediately as Unit productions: a) 0 b) 1 c) 2 d) 3	c
97)	Given grammar: S->aA A->a A->B B-> A B->bb Which of the following is the production of B after simplification by removal of unit productions? a) A b) bb c) aA d) A| bb	b

98)	Given Grammar: S->A, A->aA, A->e, B->bA Which among the following productions are Useless productions? a) S->A b) A->aA c) A->e d) B->bA	d
99)	Let G be a grammar. When the production in G satisfy certain restrictions, then G is said to be in _____. a) restricted form b) parsed form c) normal form d) all of the mentioned	c.
100)	The DFA shown below accepts the set of all strings over {0, 1} that  a. End with 00 b. End with 0 c. Begin either with 0 or 1 d. Contain the substring 00	a.

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	Question Bank of CA 5.4 Computer Graphics(254504)	ANS
1)	Which devices provides positional information to the graphics system ? A. Input devices B. Output devices C. Pointing devices D. Both a and c	**D**
2)	The number of pixels stored in the frame buffer of a graphics system is known as A. Resolution B. Depth C. Resolution D. Only a	**D**
3)	In graphical system, the array of pixels in the picture are stored in A. Memory B. Frame buffer C. Processor D. All of the mentioned	A
4)	Heat supplied to the cathode by directing a current through a coil of wire is called A. Electron gun B. Electron beam C. Filament D. Anode and cathode	**C**
5)	The maximum number of points that can be displayed without overlap on a CRT is referred as A. Picture B. Resolution C. Persistence D. Neither b nor c	**B**
6)	_____ stores the picture information as a charge distribution behind the phosphor-coated screen. A. Cathode ray tube B. Direct-view storage tube C. Flat panel displays D. 3D viewing device	**B**
7)	GUI means – A. Graphical user interaction B. Graphical user interface C. Graphical uniform interaction D. None of the above	**B**

8)	Any CRT based display must be refreshing at least _____ times a second A. 20 B. 30 C. 40 D. 10	**B**
9)	The resolution of Raster scan display is A. Low B. High C. Medium D. None	**A**
10)	A shadow mask CRT has _____ phosphor color dots at each pixel position A. 1 B. 2 C. 3 D. None of the above	**A**
11)	LCD means A. Liquid chrome data B. Liquid crystal data C. Liquid crystal displays D. None of the above	**C**
12)	Which of the adapter does not support all points' addressable display? A. VGA B. CGA C. MGA D. EGA	**D**
13)	We can align the electric gun with the help of A. shadow mask B. resolution C. pixel D. refresh	**C**
14)	In which system, the Shadow mask methods are commonly used A. Raster-scan system B. Random-scan system C. Only b D. Both a and b	**A**
15)	The process of digitizing a given picture definition into a set of pixel-intensity for storage in the frame buffer is called A. Rasterization B. Encoding C. Scan conversion D. True color system	**C**

16)	The primary output device in a graphics system is_____ A. Scanner B. Video monitor C. Neither a nor b D. Printer	**B**
17)	On a black and white system with one bit per pixel, the frame buffer is commonly called as A. Pix map B. Multi map C. Bitmap D. All of the mentioned	**C**
18)	Which of the following device is not the input device? A. Trackball and space ball B. Data glove C. Only d D. Impact printers	**C**
19)	DSVT stands for A. Digital View Storing Table B. Digital Visual Storage Tube C. Direct View Storage Tube D. Digital View Storage Tube	**C**
20)	Which equation is correct about line segment- A. x=yc+m B. y=mx+c C. y=mc+x D. None of the above	**B**
21)	On raster system, lines are plotted with A. Lines B. Dots C. Pixels D. None of the mentioned	**C**
22)	DDA stands for- A. Digital Data analyser B. Digital Direct analysis C. Digit Distinct analysis D. Digital Differential analyser	**D**
23)	Which of the following method is fastest pixel position calculating method A. Bresenham's algorithm B. DDA algorithm C. Midpoint algorithm D. None of the above	**B**

24)	An accurate and efficient raster line-generating algorithm is A. DDA algorithm B. Mid-point algorithm C. Parallel line algorithm D. Bresenham's line algorithm	**D**
25)	In Bresenham's line algorithm, if the distances d1 < d2 then decision parameter Pk is_____ A. Positive B. Equal C. Negative D. Option a or c	**C**
26)	If the boundary is specified in a single color, and if the algorithm proceeds pixel by pixel until the boundary color is encountered is called A. Scan-line fill algorithm B. Boundary-fill algorithm C. Flood-fill algorithm D. Parallel curve algorithm	**B**
27)	If we want to recolor an area that is not defined within a single color boundary is known as A. Boundary-fill algorithm B. Parallel curve algorithm C. Flood-fill algorithm D. Only b	**C**
28)	A translation is applied to an object by A. Repositioning it along with straight line path B. Repositioning it along with circular path C. Only b D. All of the mentioned	**A**
29)	We translate a two-dimensional point by adding A. Translation distances B. Translation difference C. X and Y D. Only a	**D**
30)	The translation distances (dx, dy) is called as A. Translation vector B. Shift vector C. Both a and b D. Neither a nor b	**C**
31)	In 2D-translation, a point (x, y) can move to the new position (x', y') by using the equation A. x'=x+dx and y'=y+dx B. x'=x+dx and y'=y+dy C. X'=x+dy and Y'=y+dx D. X'=x-dx and y'=y-dy	**B**

32)	The two-dimensional translation equation in the matrix form is A. P'=P+T B. P'=P-T C. P'=P*T D. P'=p	**A**
33)	_____ is a rigid body transformation that moves objects without deformation. A. Rotation B. Scaling C. Translation D. All of the mentioned	**C**
34)	A straight line segment is translated by applying the transformation equation A. P'=P+T B. Dx and Dy C. P'=P+P D. Only c	**A**
35)	The basic geometric transformations are A. Translation B. Rotation C. Scaling D. All of the mentioned	**D**
36)	Which is not polygon filling algorithm? A. Flood fill B. Scanline fill C. Boundary fill D. Heap fill	**D**
37)	A two dimensional rotation is applied to an object by A. Repositioning it along with straight line path B. Repositioning it along with circular path C. Any of the mentioned D. None of the above	**B**
38)	To generate a rotation , we must specify A. Rotation angle Θ B. Distances dx and dy C. Rotation distance D. All of the mentioned	**A**
39)	Positive values for the rotation angle Θ defines A. Counterclockwise rotations about the end points B. Counterclockwise translation about the pivot point C. Counterclockwise rotations about the pivot point D. Negative direction	**C**

40)	The two-dimensional rotation equation in the matrix form is A. P'=P+T B. P'=R*P C. P'=P*P D. P'=R+P	**B**
41)	An ellipse can also be rotated about its center coordinates by rotating A. End points B. Major and minor axes C. Only a D. None	**B**
42)	The transformation that is used to alter the size of an object is A. Scaling B. Rotation C. Translation D. Reflection	**A**
43)	The two-dimensional scaling equation in the matrix form is A. P'=P+T B. P'=S*P C. P'=P*R D. P'=R+S	**B**
44)	If the scaling factors values sx and sy are assigned to the same value then A. Uniform rotation is produced B. Uniform scaling is produced C. Scaling cannot be done D. Scaling can be done or cannot be done	**B**
45)	If the scaling factors values sx and sy are assigned to unequal values then A. Uniform rotation is produced B. Uniform scaling is produced C. Differential scaling is produced D. Scaling cannot be done	**C**
46)	The matrix representation for scaling in homogeneous coordinates is A. P'=S*P B. P'=R*P C. P'=dx+dy D. P'=S*S	**A**
47)	What is the use of homogeneous coordinates and matrix representation? A. To treat all 3 transformations in a consistent way B. To scale C. To rotate D. To shear the object	**A**

48)	If point are expressed in homogeneous coordinates then the pair of (x, y) is represented as A. (x', y', z') B. (x, y, z) C. (x', y', w) D. (x', y', w)	**D**
49)	For 2D transformation the value of third coordinate i.e. w=? A. 1 B. 0 C. -1 D. Any value	**A**
50)	If two pure reflections about a line passing through the origin are applied successively the result is _____ A. Pure rotation B. Quarter rotation C. Half rotation D. True reflection	**A**
51)	Which of the following represents shearing? A. $(x, y) \rightarrow (x+a, y+b)$ B. $(x, y) \rightarrow (ax, by)$ C. $(x, y) \rightarrow (x \cos(\theta)+y \sin(\theta), -x \sin(\theta)+y \cos(\theta))$ D. $(x, y) \rightarrow (x+ay, y+bx)$	**D**
52)	Which of this is compulsory for 2D reflection? A. Reflection plane. B. Origin C. Reflection axis D. Co-ordinate axis.	**C**
53)	A view is selected by specifying a sub-area of the _____ picture area. A. half B. total C. full D. quarter	**B**
54)	Image formed by reflection through a plane mirror is_____ A. of same size B. same orientation C. virtual D. is at same distance from the mirror	**B**
55)	Which of the following represents shearing? A. $(x, y) \rightarrow (x+a, y+b)$ B. $(x, y) \rightarrow (ax, by)$ C. $(x, y) \rightarrow (x \cos(\theta)+y \sin(\theta), -x \sin(\theta)+y \cos(\theta))$ D. $(x, y) \rightarrow (x+ay, y+bx)$	**D**

56)	Shearing is also termed as _____ A. Selecting B. Sorting C. Scaling D. Skewing	**D**
57)	Any convenient co-ordinate system or Cartesian co-ordinates which can be used to define the picture is called _____ A. spherical co-ordinates B. vector co-ordinates C. viewport co-ordinates D. world co-ordinates	**D**
58)	Which of the following co-ordinates are NOT used in 2d viewing transformation? A. modeling co-ordinates B. viewing co-ordinates C. vector co-ordinates D. device co-ordinates	**C**
59)	The process of elimination of parts of a scene outside a window or a viewport is called _____ A. cutting B. plucking C. clipping D. editing	**C**
60)	Which equation is correct about translation A. X' = Dx + X Y' = Dx + Y B. X' = Dx + X Y' = Dy + Y C. X' = Dy + X Y' = Dy + Y D. X' = Dx +Y Y' = Dy + X	**B**
61)	Which approaches are used for determine whether a particular point is inside or outside of polygon A. Even odd method B. Winding number method C. Both a &b D. None of these	**c**
62)	The selection and separation of a part of text or image for further operation are called as A. Translation B. shear C. Rotation D. Clipping	**D**

63)	Reflection about the line Y=X is equivalent to _____, followed by an anticlockwise rotation 90˚. A. Reflection about y-axis B. Reflection about x-axis C. Reflection about origin D. None of these	**B**
64)	Two consecutive rotation transformations are always_____. A. Additive B. Subtractive C. Multiplicative D. None of these	**A**
65)	Reflection about the line Y=X is equivalent to _____, followed by a anticlockwise rotation 90˚. A. Reflection about y-axis B. Reflection about x-axis C. Reflection about origin D. None of these	**B**
66)	After performing Y-shear transformation we got A(2,5),B(4,11),C(2,7).If the constant value is 2 then original coordinates will be_____. A. A(2,5),B(4,11),C(2,7) B. A(2,1),B(4,3),C(2,3) C. A(4,1),B(10,3),C(4,3) D. A(5,11),B(3,4),C(3,2)	**B**
67)	If the resultant object is given along with the set of transformations applied on it, then to find the original object we have to use_____. A. Affine transformation B. Reverse transformation C. Normal transformation D. Inverse transformation	**D**
68)	A point (x, y) becomes (-x, y) in_____, transformation. A. Reflection at X axis B. Reflection at Y axis C. Reflection at origin D. Reflection about line Y=X	**B**
69)	In Y-shear transformation point (x,y) becomes_____. A. x+yb, xa+y B. x+yb, y C. x, xa+y D. None of these	**C**
70)	Is shear transformation can be formed by scaling and rotation A. TRUE B. FALSE C. Not always D. None of these	**A**

71)	Cohen Sutherland algorithm is _____ algorithm A. Polygon clipping B. Line clipping C. Point clipping D. None of these	**B**
72)	Cyrus –Back algorithms is _____ algorithm A. Polygon clipping B. Point clipping C. Line clipping D. None of these	**C**
73)	Which of the following is polygon clipping algorithm A. Cohen Sutherland algorithm B. Cyrus-beck algorithm C. Sutherland Hodgman algorithm D. None of these	**C**
74)	A line with endpoints codes as 0000 and 0100 is? A. Partially invisible B. Completely visible C. Completely invisible D. Trivially invisible	**A**
75)	Some common clipping includes A. Curve clipping B. Polygon clipping C. Point clipping D. All of the above	**D**
76)	The process of mapping a world window in world coordinates system to viewport are called A. Transformation Viewing B. Viewport C. Clipping window D. Screen coordinates system	**A**
77)	Which approaches are used for determine whether a particular point is inside or outside of A. polygon B. Even odd method C. Winding number method D. Both a &b E. None of these	**C**

78)	P' = R * P where $P' = \begin{matrix} x' \\ y' \\ 1 \end{matrix}$ $R' = \begin{matrix} \cos(ang) & -\sin(ang) & 0 \\ \sin(ang) & \cos(ang) & 0 \\ 0 & 0 & 1 \end{matrix}$ $p = \begin{matrix} x \\ y \\ z \end{matrix}$ Such homogeneous transformation is called A. homogeneous Translation B. homogeneous Rotation C. Homogeneous Scaling D. None of the above	**B**
79)	Addition transformation are A. Shear B. Reflection C. both a &b D. None of the above	**C**
80)	The rectangle portion of the interface window that defines where the image will actually appear are called A. View port B. Transformation viewing C. Clipping window D. Screen coordinate system	**A**
81)	Coordinates of window are knows as A. Screen coordinates B. World coordinates C. Device coordinates D. Cartesian coordinates	**B**
82)	For a point to be clipped, which of the following conditions must be satisfied by the point? A. xwmin < x < xwmax B. xwmin = x = xwmax C. xwmin > x > xwmax D. ywmin = y = ywmax	**C**
83)	Which of the following is NOT a type of clipping algorithm used on the raster system? A. line clipping B. point clipping C. area clipping D. solid clipping	**D**
84)	For a point to be clipped, which of the following conditions must be satisfied by the point? A. ywmin < y < ywmax B. ywmin > y > ywmax C. ywmin = y = ywmax D. xwmin < x < xwmax	**B**

85)	Which type of clipping is used to clip character strings? A. text clipping B. line clipping C. sentence clipping D. word clipping	**A**
86)	What is the name of the space in which the image is displayed? A. World co-ordinate system B. Screen co-ordinate system C. World window D. Interface window	**B**
87)	What is the rectangle in the world defining the region that is to be displayed? A. World co-ordinate system B. Screen co-ordinate system C. World window D. Interface window	**C**
88)	The process of mapping a world window in World Coordinates to the Viewport is called Viewing transformation. A. True B. False	**A**
89)	By changing the dimensions of the viewport, the _____ and _____ of the objects being displayed can be manipulated. A. Number of pixels and image quality B. X co-ordinate and Y co-ordinate C. Size and proportions D. All of these	**C**
90)	Cohen-Sutherland clipping is an example of _____ A. polygon clipping B. text clipping C. line clipping D. curve clipping	**C**
91)	The Cohen-Sutherland algorithm divides the region into _____ number of spaces. A. 8 B. 6 C. 7 D. 9	**D**
92)	The Cohen–Sutherland algorithm can be only be used on a rectangular clip window. A. True B. False	**A**
93)	The 4-bit code of top-left region of the window is _____ A. 1001 B. 1100 C. 0101 D. 1010	**B**

94)	If the logical AND of the endpoint codes is NOT zero, the line can be trivially accepted. A. True B. False	**B**
95)	Liang–Barsky algorithm is a _____ clipping algorithm. A. circle B. text C. line D. pixel	**C**
96)	The ideas of the Liang-Barsky algorithm are the same with which algorithm? A. Cyrus Beck algorithm B. Liam-Chopsky algorithm C. Cohen Sutherland algorithm D. All have the same	**A**
97)	The Liang-Barsky algorithm is more efficient than the Cohen Sutherland algorithm. A. True B. False	**A**
98)	Which type of arithmetic is used in Liang Barsky algorithm? A. simple arithmetic operations B. floating point arithmetic C. fixed point arithmetic D. logarithmic operations	**B**
99)	. How many edges of the clipping are/is present in 2D? A. 1 B. 2 C. 3 D. 4	**D**
100)	The scale factor of viewport transformation for x co-ordinate is _____ A. Sx = (svmax – svmin)/ (swmax – swmin) B. Sx = (svmax – svmin)/ (swmax + swmin) C. Sx = (svmin – svmax)/ (swmax – swmin) D. Sx = (svmax + svmin)/ (swmax – swmin)	**A**

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Question Bank of CA 7.1 Design and Analysis of Algorithms(254701)	ANS
ou are given a knapsack that can carry a maximum weight of 60. There 4 items with weights {20, 30, 40, 70} and values {70, 80, 90, 200}. at is the maximum value of the items you can carry using the apsack? 160 200 170 90	a
e 0-1 Knapsack problem can be solved using Greedy algorithm. True False	b
hen a top-down approach of dynamic programming is applied to a blem, it usually _____ Decreases both, the time complexity and the space complexity Decreases the time complexity and increases the space complexity ncreases the time complexity and decreases the space complexity ncreases both, the time complexity and the space complexity	b
at is a subset sum problem? finding a subset of a set that has sum of elements equal to a given mber checking for the presence of a subset that has sum of elements equal to iven number and printing true or false based on the result inding the sum of elements present in a set finding the sum of all the subsets of a set	b
ich of the following is not true about subset sum problem? he recursive solution has a time complexity of O(2n) here is no known solution that takes polynomial time he recursive solution is slower than dynamic programming solution he dynamic programming solution has a time complexity of O(n log n)	d
ich of the following algorithm can be used to solve the Hamiltonian path blem efficiently? branch and bound terative improvement divide and conquer greedy algorithm	a

ich of the following is false about Prim's algorithm? t is a greedy algorithm t constructs MST by selecting edges in increasing order of their weights t never accepts cycles in the MST t can be implemented using the Fibonacci heap	b
oose the correct answer for the followingstatements: e theory of NP–completeness provides a method of obtaining a polynomial e for NPalgorithms. NP-complete problem areNP-Hard. is FALSE and II is TRUE is TRUE and II is FALSE oth are TRUE Both are FALSE	a
e upper bound on the time complexity of the nondeterministic sorting orithm is (n) (n log n) (1) (log n)	a
cursive algorithms are basedon Divideand conquer approach Top-down approach Bottom-up approach Hierarchical approach	C
w do you determine the cost of a spanningtree? y the sum of the costs of the edges of the tree y the sum of the costs of the edges and vertices of the tree y the sum of the costs of the vertices of the tree By the sum of the costs of the edges of the graph	a
me the node which has been generated but none of its children nodes have n generated in state space tree of backtrackingmethod. ead node ive node -Node StateNode	b

w many nodes are there in a full state space tree with n = 6? 5 4 3 2	c
m the following chose the one which belongs to the algorithm paradigm er than to which others from the following belongsto. Minimum & Maximum problem. Knapsack problem election problem. Merge sort.	b
at is the type of the algorithm used in solving the 4 Queensproblem? reedy ynamic ranch and Bound acktracking.	d
eedy job scheduling with deadlines algorithms' complexity is definedas (N) 2(n log n) (n2log n) O (n log n)	a
is the minimum number of steps that can executed for the enparameters Average case Time complexity Worstcase Bestcase	d

sorting a file of size n by straight selection sort, the number of comparisons de in the first pass is n - 1 (n - 1)/2 None of the above	b
knapsack is based on method greedy method dynamic programming branch and bound divide andconquer	b
ffmancodes are theapplications of with minimal weighted external path gth obtained by an optimalset. SST MST Binary tree Weighted Graph	c
is a round trip path along n edges of G that visits every vertex once and urns to its startingposition. MST Multistage Graph SP HamiltonianCycle	d
e following numbers are inserted into an empty binary search tree in the en order: 10, 1, 3, 5, 15, 12, 16. What is the height of the binary search tree e height is the maximum distance of a leaf node from theroot)? 3 4 5	b

G be a simple graph with 20 vertices and 100 edges. The size of the nimum vertex cover of G is 8. Then, the size of the maximum independent of G is 2 3 Less than 8 More than 12	a
Priority-Queue is implemented as a Max-Heap. Initially, it has 5 elements. e level- order traversal of the heap is given below: 10, 8,5,3,2 Two new ments 1 and 7 are inserted in the heap in that order. The level-order traversal he heap after the insertion of the elements is 10,8,7,5,3,2,1 10,8,7,2,3,1,5 10,8,7,1,2,3,5 10,8,7,3,2,1,5	D
hich of the following problems should be solved using dynamic gramming? Mergesort Binary search Longest common subsequence Quicksort	c
hich of the following is true about Huffman Coding. uffman coding may become lossy in some cases Huffman Codes may not be optimal lossless codes in some cases n Huffman coding, no code is prefix of any other code. ll of the above	c
hich of the following problems is NOT solved using dynamic gramming? 0/1 knapsack problem Matrix chain multiplication problem Edit distance problem Fractional knapsack problem	d

pological sort can be applied to which of the following graphs? Undirected Cyclic Graphs Directed Cyclic Graphs Undirected Acyclic Graphs Directed Acyclic Graphs	d
most of the cases, topological sort starts from a node which has _____ Maximum Degree Minimum Degree Any degree Zero Degree	d
____is the first step in solving the problem Understanding the Problem Identify the Problem Evaluate the Solution None of these	B
quick sort, the number of partitions into which the file of size n is ided by a selected record is n n - 1 2 None of the above	B
amples of O(1) algorithms are_____. Multiplying two numbers. assigning some value to a variable displaying some integer on console All of the above	D
amples of $O(n^2)$ algorithms are_____. Adding of two Matrices Initializing all elements of matrix by zero Both A and B Neither A nor B	C

a Max heap the largest key is at the root a leaf a node None of the above	A
heap sort the input is arranged in the form of a heap tree queue None of the above	A
ppose we need to sort a list of employee records in ascending order, ng the social security number (a 9-digit number) as the key (i.e., sort records by social security number). If we need to guarantee that the ning time will be no worse than n log n, which sorting methods could use? mergesort quicksort insertion sort Either mergesort or quicksort	**A**
he Union/Find algorithm, the ranks of the nodes on a path will rease monotonically from? eaf to root oot to node oot to leaf eft subtree to right subtree	a
velling salesman problem is an example of Dynamic Algorithm Greedy Algorithm Recursive Approach Divide & Conquer	b
ich of the following is an example of dynamic programming approach? Fibonacci Series Tower of Hanoi Dijkstra Shortest Path All of the above	d

ich of the following uses memoization? Greedy approach Divide and conquer approach Dynamic programming approach None of the above	c
kstra's algorithm is based on which paradigm? Greedy paradigm Backtracking paradigm Dynamic Programming paradigm Divide and Conquer paradigm	A
hich of the problems cannot be solved by backtracking method? n-queen problem subset sum problem hamiltonian circuit problem travelling salesman problem	d
cktracking algorithm is implemented by constructing a tree of choices ed as? State-space tree State-chart tree Node tree Backtracking tree	a
w many solutions are there for 8 queens on 8*8 board? 12 91 92 93	c
hromatic number of a line graph is 4 then the chromatic index of the ph will be? 0 1 4 nformation insufficient	c

ich of the following algorithms solves the all pair shortest path problem? Diskstra's algorithm Floyd algorithm rim's algorithm Warshall's algorithm	b
raph can be represented as an _ _ _ _ _ _ Linked list Structure nion Queue	a
which of the following class does a CNF-satisfiability problem belong? NP class P class NP complete NP hard	c
ich of the following methods can be used to solve the Knapsack blem? Brute force algorithm Recursion Dynamic programming Brute force, Recursion and Dynamic Programming	d
ctional knapsack problem is also known as _____ 0/1 knapsack problem Continuous knapsack problem Divisible knapsack problem Non continuous knapsack problem	b
he complexity of fractional knapsack problem is _____ O(n log n) O(n) $O(n^2)$ O(nW)	a
ster's theorem is used for? solving recurrences solving iterative relations analysing loops calculating the time complexity of any code	a

assen's algorithm is a/an_____ algorithm. Non- recursive Recursive Approximation Accurate	b
assen's Matrix Algorithm was proposed by _____ Volker Strassen Andrew Strassen Victor Jan Virginia Williams	a
nsider the two matrices P and Q which are 10 x 20 and 20 x 30 matrices pectively. What is the number of multiplications required to multiply the o matrices? 10*20 20*30 10*30 10*20*30	d
nsider the matrices P, Q and R which are 10 x 20, 20 x 30 and 30 x 40 trices respectively. What is the minimum number of multiplications uired to multiply the three matrices? 18000 12000 24000 32000	a
ich of the following is not an application of topological sorting? Finding prerequisite of a task Finding Deadlock in an Operating System Finding Cycle in a graph Ordered Statistics	d
nan wants to go different places in the world. He has listed them down But there are some places where he wants to visit before some other ces. What application of graph can he use to determine that? Depth First Search Breadth First Search Topological Sorting Dijkstra's Shortest path algorithm	c

nsider the strings “PQRSTPQRS” and “PRATPBRQRPS”. What is the gth of the longest common subsequence? 9 8 7 6	c
anch and bound is a _____ problem solving technique data structure sorting algorithm ype of tree	a
ich of the following is not a branch and bound strategy to generate anches? LIFO branch and bound FIFO branch and bound Lowest cost branch and bound Highest cost branch and bound	d
oose the correct statement from the following. branch and bound is more efficient than backtracking branch and bound is not suitable where a greedy algorithm is not plicable branch and bound divides a problem into at least 2 new restricted sub blems backtracking divides a problem into at least 2 new restricted sub blems	c
_____ is the class of decision problems that can be solved by non-erministic polynomial algorithms? NP P Hard Complete	A

ven an array arr = {45,77,89,90,94,99,100} and key = 100; What are the d values(corresponding array elements) generated in the first and cond iterations? 90 and 99 90 and 100 89 and 94 94 and 99	
at is the advantage of recursive approach than an iterative approach? Consumes less memory Less code and easy to implement Consumes more memory More code has to be written	
ich of the given options provides the increasing order of asymptotic nplexity of functions f1, f2, f3 and f4? n) = 2^n f2(n) = n^(3/2) f3(n) = nLogn f4(n) = n^(Logn) 3, f2, f1, f4 2, f3, f1, f4 2, f3, f4, f1 f3, f2, f4, f1	
ps of Divide and Conquer approach ivide, Conquer and Combine Combine, Conquer and Divide Combine, Divide and Conquer Divide, Combine and Conquer	
e complexity of searching an element from a set of n elements using Binary rch algorithm is (n log n) O(log n) O(n2) In O(n)	
he development of dynamic programming the value of an optimal solution omputed in op up fashion Bottom up fashion Correct In any way	

e number of operations in Matrix multiplications M1, M2, M3, M4 and M5 sizes 5X10, 10X100, 100X2, 2X20 and 20X50 830 4600 900 2890	
ich case of Master's theorem is applicable in the recurrence relation)=0.5*T(n/2)+1/n? ase 3 Case 1 Master's theorem is not applicable Case 2	
___ is a condition that is always true at a particular point in an algorithm. ssertion constant exception nvariant	
vision Pattern of Problems in Divide and Conquer approach erative Recursive Parallel Random	
a problem can be broken into subproblems which are reused several es, the problem possesses _____ property. Overlapping subproblems Optimal substructure Memorization Greedy	
ich of the following sorting algorithms does not have a worst case running e of O(n2) ? uick sort Merge sort nsertion sort Bubble sort	

e running time of quick sort depends on the selection of. election of pivot elements t Number of input Number of passes Arrangements of the elements	
ne Complexity of Optimal binary search tree. (logn) O(n) (n!) (n*n)	
a Structure used for the Merge Sort wo Pointers Two pointers and N Extra Arrays N/2 pointers and N/2 Extra Arrays Two Pointers and an Extra Array	
e optimal solution to a problem is a combination of optimal solutions to its problems. This is known as rincipleof Duality rinciple of Feasibility rinciple of Optimality rinciple of Dynamicity.	
roblem L is NP-complete iff L is NP-hard and ≈ NP α NP ε NP = NP	
at would be the cost value for any answering node of a sub tree with root ‘r’ ng branch-bound algorithm? Maximum Minimum ptimal verage	

msalgorithm is based on method ivide and conquer method reedy method ynamic programming ranch and bound	
w many number of comparisons are required in insertion sort to sort a file if file is sorted in reverse order? 2 N N-1 /2	
w many number of comparisons are required in insertion sort to sort a file if file is already sorted? 2 -1 N/2	
e worst-case time complexity of Quick Sort is_____. (n2) O(log n) O(n) O(n logn)	
per bound is denotedas o ω O	
e worst-case time complexity of Merge Sort is_____. (n2) O(log n) (n) O(n logn)	

e algorithm like Quick sort does not require extra memory for carrying out sorting procedure. This technique is called _____. n-place table nstable in-partition	
ich of the following sorting procedures is the slowest? uick sort eap sort hell sort ubble sort	
o main measures for the efficiency of an algorithm are rocessor and memory omplexity and capacity ime and space ata and space	
e time factor when determining the efficiency of algorithm is measured by counting microseconds ounting the number of key operations ounting the number of statements ounting the kilobytes of algorithm	
ich of the following case does not exist in complexity theory? best case orst case verage case ull case	
e concept of order Big O is important because t can be used to decide the best algorithm that solves a given problem t determines the maximum size of a problem that can be solved in a given ount of time t is the lower bound of the growth rate of algorithm oth a and b	

e recurrence relation capturing the optimal execution time of the Towers of noi problem with n discs is (n) = 2T(n - 2) + 2 (n) = 2T(n - 1) + n (n) = 2T(n/2) + 1 (n) = 2T(n - 1) + 1	
implement Dijkstra's shortest path algorithm on unweighted graphs so that uns in linear time, the data structure to be used is: Stack Heap Queue Binary Tree	
sort which compares adjacent elements in a list and switches where essary is ____. sertion sort eap sort uick sort ubble sort	
Which design strategy stops the execution when it find the solution erwise starts the problem from top ack tracking ranch and Bound Divide and conquer Dynamic programming	
analysis of algorithm, approximate relationship between the size of the job the amount of work required to do is expressed by using entral tendency ifferential equation Order of execution Order of magnitude	
adth first search cans each incident node along with its children. cans all incident edges before moving to other node. same as backtracking Scans all the nodes in random order.	

ich method of traversal does not use stack to hold nodes that are waiting to processed? ept First -search Breadth first Back-tracking	

Sr. No.	**Question Bank of** **CA 7.2Automata Theory and Computability(254702)**	ANS
1)	All the regular languages can have one or more of the following descriptions: i) DFA ii) NFA iii) e-NFA iv) Regular Expressions Which of the following are correct? a) i, ii, iv b) i, ii, iii c) i, iv d) i, ii, iii, iv	d)
2)	A turing machine is a a) real machine b) abstract machine c) hypothetical machine d) more than one option is correct	d)
3)	A turing machine operates over: a) finite memory tape b) infinite memory tape c) depends on the algorithm d) none of the mentioned	b)
4)	Which of the functions are not performed by the turing machine after reading a symbol? a) writes the symbol b) moves the tape one cell left/right c) proceeds with next instruction or halts d) none of the mentioned	d)
5)	Which of the problems were not answered when the turing machine was invented? a) Does a machine exists that can determine whether any arbitrary machine on its tape is circular. b) Does a machine exists that can determine whether any arbitrary machine on its tape is ever prints a symbol c) Hilbert Entscheidungs problem d) None of the mentioned	d)

6)	The ability for a system of instructions to simulate a Turing Machine is called _____ a) Turing Completeness b) Simulation c) Turing Halting d) None of the mentioned	a)
7)	Which of the problems are unsolvable? a) Halting problem b) Boolean Satisfiability problem c) Both (a) and (b) d) None of the mentioned	c)
8)	If d is not defined on the current state and the current tape symbol, then the machine _____ a) does not halts b) halts c) goes into loop forever d) none of the mentioned	b)
9)	A language L is said to be _____ if there is a turing machine M such that L(M)=L and M halts at every point. a) Turing acceptable b) decidable c) undecidable d) none of the mentioned	b)
10)	The language accepted by a turing machine is called _____ a) Recursive Ennumerable b) Recursive c) Both (a) and (b) d) None of the mentioned	c)
11)	Recursive languages are also known as: a) decidable b) undecidable c) sometimes decidable d) none of the mentioned	a)
12)	Let G be a grammar: S->AB|e, A->a, B->b Is the given grammar in CNF? a) Yes b) No	a)

13)	Given grammar G: (1)S->AS (2)S->AAS (3)A->SA (4)A->aa Which of the following productions denies the format of Chomsky Normal Form? a) 2,4 b) 1,3 c) 1, 2, 3, 4 d) 2, 3, 4	a)
14)	Which of the technique can be used to prove that a language is non regular? a) Ardens theorem b) Pumping Lemma c) Ogden's Lemma d) None of the mentioned	b.
15)	If L is DFA-regular, L' is a) Non regular b) DFA-regular c) Non-finite d) None of the mentioned	b.
16)	All the regular languages can have one or more of the following descriptions: i) DFA ii) NFA iii) e-NFA iv) Regular Expressions Which of the following are correct? a) i, ii, iv b) i, ii, iii c) i, iv d) i, ii, iii, iv	d.

17)	L is a regular Language if and only If the set of _____ classes of IL is finite. a) Equivalence b) Reflexive c) Myhill d) Nerode	a.
18)	According to the rice's theorem, If P is a non trivial property, Lp is : a) infinite b) decidable c) undecidable d) none of the mentioned	c.
19)	Given grammar: S->aA A->a A->B B-> A B->bb Which of the following is the production of B after simplification by removal of unit productions? a) A b) bb c) aA d) A| bb	b)
20)	RR* can be expressed in which of the forms: a) R+ b) R- c) R+ U R- d) R	a.
21)	Let G be a grammar. When the production in G satisfy certain restrictions, then G is said to be in _____. a) restricted form b) parsed form c) normal form d) all of the mentioned	c)

22)	The number of leaves in a parse tree with expression E*(E) where * and () are operators a) 5 b) 2 c) 4 d) 3	a) 5
23)	A grammar with more than one parse tree is called: a) Unambiguous b) Ambiguous c) Regular d) None of the mentioned	b)
24)	If L1 and L2 are regular sets then intersection of these two will be a) Regular b) Non Regular c) Recursive d) Non Recursive	a.
25)	Which of the following is false for a grammar G in Chomsky Normal Form: a) G has no useless symbols b) G has no unit productions c) G has no epsilon productions d) None of the mentioned	d)
26)	A CFG is ambiguous if a) It has more than one rightmost derivations b) It has more than one leftmost derivations c) No parse tree can be generated for the CFG d) None of the mentioned	b)
27)	A null production can be referred to as: a) String b) Symbol c) Word d) All of the mentioned	a) String

28)	Which of the following is incorrect according to rice theorem? Let S be a set of language hat is non trivial: a) there exists a TM that recognizes the language in S b) there exists a TM that recognizes the language not in S c) both (a) and (b) d) none of the mentioned	c.
29)	The format: A->aB refers to which of the following? a) Chomsky Normal Form b) Greibach Normal Form c) Backus Naur Form d) None of the mentioned	b)
30)	Which of the production rule can be accepted by Chomsky grammar? a) A->BC b) A->a c) S->e d) All of the mentioned	d)
31)	The entity which generate Language is termed as: a) Automata b) Tokens c) Grammar d) Data	c.
32)	Which among the following cannot be accepted by a regular grammar? a) L is a set of numbers divisible by 2 b) L is a set of binary complement c) L is a set of string with odd number of 0 d) L is a set of 0n1n	d)
33)	The minimum number of productions required to produce a language consisting of palindrome strings over ∑={a,b} is a) 3 b) 7 c) 5 d) 6	c) 5
34)	Which of the following statement is correct? a) All Regular grammar are context free but not vice versa b) All context free grammar are regular grammar but not vice versa c) Regular grammar and context free grammar are the same entity d) None of the mentioned	a

35)	Are ambiguous grammar context free? a) Yes b) No	a)
36)	A->aA| a| b The number of steps to form aab: a) 2 b) 3 c) 4 d) 5	b)
37)	Which of the following the given language belongs to? L={ambmcm| m>=1} a) Context free language b) Regular language c) Both (a) and (b) d) None of the mentioned	d)
38)	Which among the following is the correct option for the given grammar? G->X111|G1,X->X0|00 a) {0a1b|a=2,b=3} b) {0a1b|a=1,b=5} c) {0a1b|a=b} d) More than one of the mentioned is correct	a)
39)	A grammar G=(V, T, P, S) is _____ if every production taken one of the two forms: B->aC B->a a) Ambiguous b) Regular c) Non Regular d) None of the mentioned	b)
40)	Which of the following statement is false in context of tree terminology? a) Root with no children is called a leaf b) A node can have three children c) Root has no parent d) Trees are collection of nodes, with a parent child relationship	a)

41)	"CFG" stands for _____ a)Context Free Graph b)Context Free Grammar c)Context Finite Graph d)Context Finite Grammar	b.
42)	While applying Pumping lemma over a language, we consider a string w that belong to L and fragment it into _____ parts. a) 2 b) 5 c) 3 d) 6	c)
43)	If we select a string w such that w∈L, and w=xyz. Which of the following portions cannot be an empty string? a) x b) y c) z d) all of the mentioned	b)
44)	There exists a language L. We define a string w such that w∈L and w=xyz and |w| >=n for some constant integer n.What can be the maximum length of the substring xy i.e. |xy|<=? a) n b) |y| c) |x| d) none of the mentioned	a)
45)	Answer in accordance to the third and last statement in pumping lemma: For all _____ xyiz ∈L a) i>0 b) i<0 c) i<=0 d) i>=0	d)
46)	Let w be a string and fragmented by three variable x, y, and z as per pumping lemma. What does these variables represent? a) string count b) string c) both (a) and (b) d) none of the mentioned	a)

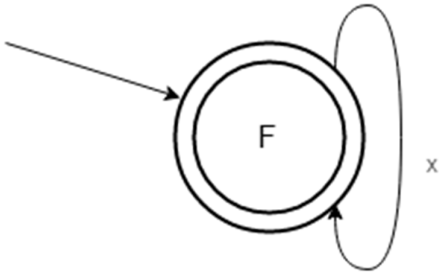
47)	Which kind of proof is used to prove the regularity of a language? a) Proof by contradiction b) Direct proof c) Proof by induction d) None of the mentioned	a.
48)	A turing machine operates over: a) finite memory tape b) infinite memory tape c) depends on the algorithm d) none of the mentioned	b.
49)	The entity which generate Language is termed as: a) Automata b) Tokens c) Grammar d) Data	c
50)	Production Rule: aAb->agb belongs to which of the following category? a) Regular Language b) Context free Language c) Context Sensitive Language d) Recursively Ennumerable Language	c
51)	The Grammar can be defined as: G=(V, ∑, p, S) In the given definition, what does S represents? a) Accepting State b) Starting Variable c) Sensitive Grammar d) None of these	b
52)	_____ States are called the halt states. a)ACCEPT and REJECT b)ACCEPT and READ c)ACCEPT AND START d)ACCEPT AND WRITE	a.

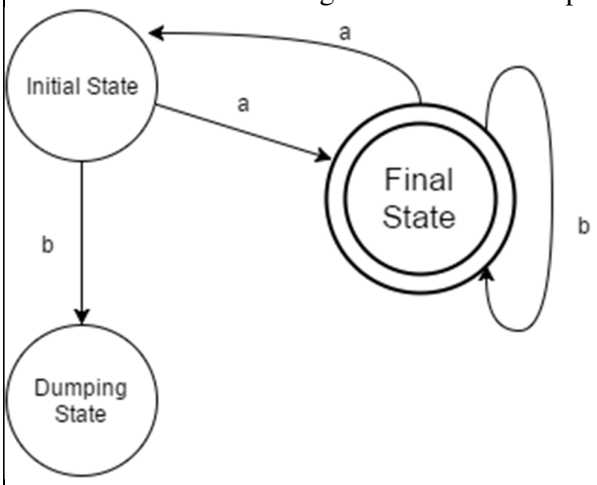
53)	Reverse of a DFA can be formed by a) using PDA b) making final state as non-final c) making final as starting state and starting state as final state d) None of the mentioned	c)
54)	Concatenation of R with Φ outputs: a) R b) Φ c) R.Φ d) None of the mentioned	b)
55)	Simplify the following regular expression: ε+1*(011) *(1*(011) *) * a) (1+011) * b) (1*(011) *) c) (1+(011) *) * d) (1011) *	a
56)	P, O, R be regular expression over ∑, P is not ε, then R=Q + RP has a unique solution: a) Q*P b) QP* c) Q*P* d) (P*O*) *	b
57)	Arden's theorem is true for: a) More than one initial states b) Null transitions c) Non-null transitions d) None of the mentioned	c
58)	The difference between number of states with regular expression (a + b) and (a + b) * is: a) 1 b) 2 c) 3 d) 0	a

59)	The PDA is called non-deterministic PDA when there are more than one out going edges from…… state a)START or READ b)POP or REJECT c)READ or POP d)PUSH or POP	c.
60)	Regular Expression denote precisely the _____ of Regular Language. a) Class b) Power Set c) Super Set d) None of the mentioned	a
61)	Relate the following statement: Statement: All sufficiently long words in a regular language can have a middle section of words repeated a number of times to produce a new word which also lies within the same language. a) Turing Machine b) Pumping Lemma c) Arden's theorem d) None of the mentioned	b
62)	Can a DFA recognize a palindrome number? a) Yes b) No c) Yes, with input alphabet as $\sum^*$ d) Can't be determined	b.
63)	Which of the following is not an example of finite state machine system? a) Control Mechanism of an elevator b) Combinational Locks c) Traffic Lights d) Digital Watches	d.

64)	Given: L= {x∈∑= {0,1} |x=0n1n for n>=1}; Can there be a DFA possible for the language? a) Yes b) No	b.
65)	The symbols that can't be replaced by anything are called ---------- a)Productions b)Terminals c)Non-terminals d)All of above	b.
66)	Transition function maps. a) Σ * Q -> Σ b) Q * Q -> Σ c) Σ * Σ -> Q d) Q * Σ -> Q	d.
67)	Number of states require to accept string ends with 10. a) 3 b) 2 c) 1 d) can't be represented.	a.
68)	The grammatical rules are often called_____ a)Productions b)Terminals c)Non-terminals d)None of given	a.
69)	The language generated by _____ is called Context Free Language (CFL). a)FA b)TG c)CFG d)TGT	c.

70)	The production of the form no terminal → Λ is said to be null production. a)TRUE b)FALSE	a.
71)	The basic limitation of finite automata is that a) It can't remember arbitrary large amount of information. b) It sometimes recognize grammar that are not regular. c) It sometimes fails to recognize regular grammar. d) All of the mentioned	a.
72)	The productions of the form nonterminal → one nonterminal, is called _____ a)Null production b)Unit production c)Null able production d)None of given	b.
73)	Which of the following is a correct statement? a) Moore machine has no accepting states b) Mealy machine has accepting states c) We can convert Mealy to Moore but not vice versa d) All of the mentioned	a.
74)	In mealy machine, the O/P depends upon? a) State b) Previous State c) State and Input d) Only Input	c.
75)	Which of the given are correct? a) Moore machine has 6-tuples b) Mealy machine has 6-tuples c) Both Mealy and Moore has 6-tuples d) None of the mentioned	c.
76)	The major difference between Mealy and Moore machine is about: a) Output Variations b) Input Variations c) Both d) None of the mentioned	a.

77)	Mealy and Moore machine can be categorized as: a) Inducers b) Transducers c) Turing Machines d) Linearly Bounder Automata	b.
78)	Which one among the following is true? A mealy machine a) produces a language b) produces a grammar c) can be converted to NFA d) has less circuit delays	d.
79)	CNF is stands for a)Context Normal Form b)Complete Normal Form c)Chomsky Normal Form d)Compared Null Form	c.
80)	What does the following figure most correctly represents?  a) Final state with loop x b) Transitional state with loop x c) Initial state as well as final state with loop x d) Insufficient Data	c.

81)	Which of the following will not be accepted by the following DFA?  a) ababaabaa b) abbbaa c) abbbaabb d) abbaabbaa	a.
82)	"One language can be expressed by more than one FA". This statement is _____ a)True b)False c)Sometimes true & sometimes false d)None of these	a.
83)	The part of an FA, where the input string is placed before it is run, is called _____ a)State b)Transition c)Input Tape d)Output Tape	c.
84)	Which of the operations are eligible in PDA? a) Push b) Delete c) Insert d) Find	a

85)	A string is accepted by a PDA when a) Stack is empty b) Acceptance state c) Both (a) and (b) d) None of the mentioned	c.
86)	The following move of a PDA is on the basis of: a) Present state b) Input Symbol c) Both (a) and (b) d) None of the mentioned	c.
87)	Which of the following was not a part of Chomsky hierarchy? a) Context sensitive grammar b) Unrestricted grammar c) Recursive grammar d) None of the mentioned	c.
88)	Assume the R is a relation on a set A, aRb is partially ordered such that a and b are _____ a) reflexive b) transitive c) symmetric d) reflexive and transitive	d.
89)	Which of the following is a not a part of 5-tuple finite automata? a) Input alphabet b) Transition function c) Output Alphabet d) Initial State	c.
90)	Moore Machine is an application of: a) Finite automata without input b) Finite automata with output c) Non- Finite automata with output d) None of the mentioned	b.
91)	In Moore machine, output is produced over the change of: a) states b) transitions c) Both d) None of the mentioned	a.

92)	Myhill Nerode theorem is consisting of the followings, a)L partitions Σinto distinct classes. b)If L is regular then, L generates finite number of classes. c)If L generates finite number of classes then L is regular. d)All of above	d.
93)	Consider the following two languages: L1 = {x | for some y with |y| = 2^|x|,**xy ∈ L** and L is regular language} L2 = {x | for some y such that |x| = |y|, xy ∈ L and L is regular language} Which one of the following is correct? a. Only L1 is regular language b. Only L2 is regular language c. Both L1 and L2 are regular languages d. Both L1 and L2 are not regular languages	c.
94)	Pushdown automata can recognize language generated by ..... a. Only context free grammar b. Only regular grammar c. Context free grammar or regular grammar d. Only context sensitive grammar	c.

95)	To obtain a string of n Terminals from a given Chomsky normal form grammar, the number of productions to be used is: a. 2n−1 b. 2n c. n+1 d. n^2	a.
96)	A turing machine that is able to simulate other turing machines: a) Nested Turing machines b) Universal Turing machine c) Counter machine d) None of the mentioned	b.
97)	Context sensitive language can be recognized by a: a. Finite state machine b. Deterministic finite automata c. Non-deterministic finite automata d. Linear bounded automata	d.
98)	The set A={ 0^n 1^n 2^n | n=1, 2, 3, ... } is an example of a grammar that is: a. Context sensitive b. Context free c. Regular d. None of the above	a.
99)	Which of the following is not a regular expression? a) [(a+b)*-(aa+bb)]* b) [(0+1)-(0b+a1)*(a+b)]* c) (01+11+10)* d) (1+2+0)*(1+2)*	b.

100)	Following context free grammar S —> aB | bA A —>b | aS | bAA B —> b | bS | aBB generates strings of terminals that have a) equal number of a's and b's b) odd number of a's and odd number b's c) even number of a's and even number of b's d) d. odd number of a's and even number of a's	a

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	Question Bank of CA 7.3 Artificial Intelligence(254703)	ANS
1)	What is the main task of a problem-solving agent? a) Solve the given problem and reach to goal b) To find out which sequence of action will get it to the goal state c) All of the mentioned d) None of the mentioned	C
2)	Using logic to represent and reason we can represent knowledge about the world with facts and rules. a) True b) False	A
3)	Uncertainty arises in the wumpus world because the agent's sensors give only _____ a) Full & Global information b) Partial & Global Information c) Partial & local Information d) Full & local information	C
4)	A Hybrid Bayesian network contains _____ a) Both discrete and continuous variables b) Only Discrete variables c) Only Discontinuous variable d) Both Discrete and Discontinuous variable	À
5)	If a hypothesis says it should be positive, but in fact it is negative, we call it _____ a) A consistent hypothesis b) A false negative hypothesis c) A false positive hypothesis d) A specialized hypothesis	C
6)	The primitives in probabilistic reasoning are random variables. a) True b) False	A
7)	Which is true for Decision theory? a) Decision Theory = Probability theory + utility theory b) Decision Theory = Inference theory + utility theory c) Decision Theory = Uncertainty + utility theory d) Decision Theory = Probability theory + preference	C

8)	A constructive approach in which no commitment is made unless it is necessary to do so is _____ a) Least commitment approach b) Most commitment approach c) Nonlinear planning d) Opportunistic planning	A
9)	What is the extraction of the meaning of utterance? a) Syntactic b) Semantic c) Pragmatic d) None of the mentione	B
10)	What is meant by compositional semantics? a) Determining the meaning b) Logical connectives c) Semantics d) None of the mentioned	A
11)	What can't be done in the semantic interpretation? a) Logical term b) Complete logical sentence c) Both Logical term & Complete logical sentence d) None of the mentioned	C
12)	which is used to mediate between syntax and semantics? a) Form b) Intermediate form c) Grammer d) All of the mentioned	B
13)	What kind of interpretation is done by adding context-dependant information? a) Semantic b) Syntactic c) Pragmatic d) None of the mentioned	C
14)	How many issues are available in describing degree of belief? a) 1 b) 2 c) 3 d) 4	B

15)	What is used for probability theory sentences? a) Conditional logic b) Logic c) Extension of propositional logic d) None of the mentioned	C
16)	Where does the dependance of experience is reflected in prior probability sentences? a) Syntactic distinction b) Semantic distinction c) Both Syntactic & Semantic distinction d) None of the mentioned	À
17)	Where does the degree of belief is applied? a) Propositions b) Literals c) Variables d) Statements	A
18)	How many formal languages are used for stating propositions? a) 1 b) 2 c) 3 d) 4	B
19)	What is the basic element of a language? a) Literal b) Variable c) Random variable d) All of the mentioned	C
20)	Which is the complete specification of the state of the world? a) Atomic event b) Complex event c) Simple event d) None of the mentioned	A
21)	Which variable cannot be written in entire distribution as a table? a) Discrete b) Continuous c) Both Discrete & Continuous d) None of the mentioned	B

22)	What is meant by probability density function? a) Probability distributions b) Continuous variable c) Discrete variable d) Probability distributions for Continuous variables	D
23)	How many terms are required for building a bayes model? a) 1 b) 2 c) 3 d) 4	C
24)	What is needed to make probabilistic systems feasible in the world? a) Reliability b) Crucial robustness c) Feasibility d) None of the mentioned	B
25)	What does the bayesian network provides? a) Complete description of the domain b) Partial description of the domain c) Complete description of the problem d) None of the mentioned	A
26)	To which does the local structure is associated? a) Hybrid b) Dependant c) Linear d) None of the mentioned	C
27)	What is the consequence between a node and its predecessors while creating bayesian network? a) Functionally dependent b) Dependant c) Conditionally independent d) Both Conditionally dependant & Dependant	C
28)	The values of the set membership is represented by _____ a) Discrete Set b) Degree of truth c) Probabilities d) Both Degree of truth & Probabilities	B

29)	_____ are algorithms that learn from their more complex environments (hence eco) to generalize, approximate and simplify solution logic. a) Fuzzy Relational DB b) Ecorithms c) Fuzzy Set d) None of the mentioned	C
30)	What will take place as the agent observes its interactions with the world? a) Learning b) Hearing c) Perceiving d) Speech	A
31)	Which is used for utility functions in game playing algorithm? a) Linear polynomial b) Weighted polynomial c) Polynomial d) Linear weighted polynomial	D
32)	What takes input as an object described by a set of attributes? a) Tree b) Graph c) Decision graph d) Decision tree	D
33)	How the decision tree reaches its decision? a) Single test b) Two test c) Sequence of test d) No test	C
34)	Which algorithm are in more similar to backward chaining algorithm? a) Depth-first search algorithm b) Breadth-first search algorithm c) Hill-climbing search algorithm d) All of the mentioned	A
35)	What form of negation does the prolog allows? a) Negation as failure b) Proposition c) Substitution d) Negation as success	A

36)	Which is omitted in prolog unification algorithm? a) Variable check b) Occur check c) Proposition check d) Both Occur & Proposition check	B
37)	There exists two way to infer using semantic networks in which knowledge is represented as Frames. 1) Intersection Search 2) Inheritance Search a) True b) False	A
38)	How many functions are available in the unification and lifting process? a) 1 b) 2 c) 3 d) 4	D
39)	How the buckets are stored in predicate indexing? a) Lists b) Stack c) Hashes d) None of the mentioned	C
40)	Rational agent is the one who always does the right thing. a) True b) False	A
41)	What is Artificial intelligence? a) Putting your intelligence into Computer b) Programming with your own intelligence c) Making a Machine intelligent d) Putting more memory into Computer	C
42)	Artificial Intelligence has its expansion in the following application. a) Planning and Scheduling b) Game Playing c) Robotics d) All of the above	D

43)	The characteristics of the computer system capable of thinking, reasoning and learning is known is a) machine intelligence b) human intelligence c) artificial intelligence d) virtual intelligence	C
44)	Which of the following search belongs to totally ordered plan search? a) Forward state-space search b) Hill-climbing search c) Depth-first search d) Breadth-first search	A
45)	Which cannot be taken as advantage for totally ordered plan search? a) Composition b) State search c) Problem decomposition d) None of the mentioned	C
46)	In which of the following situations might a blind search be acceptable? a) real-life situation b) complex game c) small search space d) all of the mentioned	C
47)	Which search method takes less memory? a) Depth-First Search b) Breadth-First search c) Optimal search d) Linear Search	A
48)	A heuristic is a way of trying _____ a) To discover something or an idea embedded in a program b) To search and measure how far a node in a search tree seems to be from a goal c) To compare two nodes in a search tree to see if one is better than the other is d) All of the mentioned	D
49)	Which of the following, is a component of an expert system? a) inference engine b) knowledge base c) user interface d) all of the mentioned	D

50)	What is state space? a) The whole problem b) Your Definition to a problem c) Problem you design d) Representing your problem with variable and parameter	D
51)	A search algorithm takes _____ as an input and returns _____ as an output. a) Input, output b) Problem, solution c) Solution, problem d) Parameters, sequence of actions	B
52)	A problem in a search space is defined by one of these state. a) Initial state b) Last state c) Intermediate state d) All of the mentioned	A
53)	The Set of actions for a problem in a state space is formulated by a _____ a) Intermediate states b) Initial state c) Successor function, which takes current action and returns next immediate state d) None of the mentioned	C
54)	The process of removing detail from a given state representation is called _____ a) Extraction b) Abstraction c) Information Retrieval d) Mining of data	B
55)	What are taken into account of state-space search? a) Postconditions b) Preconditions c) Effects d) Both Preconditions & Effects	D
56)	Fuzzy Set theory defines fuzzy operators. Choose the fuzzy operators from the following. a) AND b) OR c) NOT d) All of the mentioned	D

57)	_____ is/are the way/s to represent uncertainty. a) Fuzzy Logic b) Probability c) Entropy d) All of the mentioned	D
58)	There exist only two types of quantifiers, Universal Quantification and Existential Quantification. a) True b) False	A
59)	A _____ is used to demonstrate, on a purely syntactic basis, that one formula is a logical consequence of another formula) a) Deductive Systems b) Inductive Systems c) Reasoning with Knowledge Based Systems d) Search Based Systems	A
60)	First Order Logic is also known as _____ a) First Order Predicate Calculus b) Quantification Theory c) Lower Order Calculus d) All of the mentioned	D
61)	Which is used to compute the truth of any sentence? a) Semantics of propositional logic b) Alpha-beta pruning c) First-order logic d) Both Semantics of propositional logic & Alpha-beta pruning	A
62)	Which are needed to compute the logical inference algorithm? a) Logical equivalence b) Validity c) Satisfiability d) All of the mentioned	D
63)	Which form is called as a conjunction of disjunction of literals? a) Conjunctive normal form b) Disjunctive normal form c) Normal form d) All of the mentioned	A

64)	Which is also called single inference rule? a) Reference b) Resolution c) Reform d) None of the mentioned	B
65)	What is the condition of literals in variables? a) Existentially quantified b) Universally quantified c) Quantified d) None of the mentioned	B
66)	What is meant by factoring? a) Removal of redundant variable b) Removal of redundant literal c) Addition of redundant literal d) Addition of redundant variable	B
67)	When the resolution is called as refutation-complete? a) Sentence is satisfiable b) Sentence is unsatisfiable c) Sentence remains the same d) None of the mentioned	B
68)	Which closely resembles propositional definite clause? a) Resolution b) Inference c) Conjunction d) First-order definite clauses	D
69)	The room temperature is hot. Here the hot (use of linguistic variable is used) can be represented by _____ a) Fuzzy Set b) Crisp Set c) Fuzzy & Crisp Set d) None of the mentioned	A
70)	What is the form of Fuzzy logic? a) Two-valued logic b) Crisp set logic c) Many-valued logic d) Binary set logic	C

71)	How the bayesian network can be used to answer any query? a) Full distribution b) Joint distribution c) Partial distribution d) All of the mentioned	B
72)	Where does the bayes rule can be used? a) Solving queries b) Increasing complexity c) Decreasing complexity d) Answering probabilistic query	D
73)	Which algorithm takes two sentences and returns a unifier? a) Inference b) Hill-climbing search c) Depth-first search d) Unify algorithm	D
74)	Which process makes different logical expression looks identical? a) Lifting b) Unification c) Inference process d) None of the mentioned	B
75)	Frames in artificial intelligence is derived from semantic nets. a) True b) False	A
76)	Which of the following elements constitutes the frame structure? a) Facts or Data b) Procedures and default values c) Frame names d) Frame reference in hierarchy	A
77)	Semantic Network represents _____ a) Syntactic relation between concepts b) Semantic relations between concepts c) All of the mentioned d) None of the mentioned	B
78)	Graph used to represent semantic network is _____ a) Undirected graph b) Directed graph c) Directed Acyclic graph (DAG) d) Directed complete graph	B

79)	What are Semantic Networks? a) A way of representing knowledge b) Data Structure c) Data Type d) None of the mentioned	A
80)	A Horn clause is a clause with _____ positive literal. a) At least one b) At most one c) None d) All	B
81)	Forward chaining systems are _____ where as backward chaining systems are _____ a) Goal-driven, goal-driven b) Goal-driven, data-driven c) Data-driven, goal-driven d) Data-driven, data-driven	C
82)	In a backward chaining system you start with the initial facts, and keep using the rules to draw new conclusions (or take certain actions) given those facts. a) True b) False	B
83)	Translate the following statement into FOL. “For every a, if a is a PhD student, then a has a master degree” a) ∀ a PhD(a) -> Master(a) b) ∃ a PhD(a) -> Master(a) c) A is true, B is true d) A is false, B is false	A
84)	Which among the following could the Existential instantiation of ∃x Crown(x) ^ OnHead(x, Johnny)? a) Crown(John) ^ OnHead(John, Jonny) b) Crown(y) ^ OnHead(y, y, x) c) Crown(x) ^ OnHead(x, Jonny) d) None of the mentioned	A
85)	Which of the following is not the style of inference? a) Forward Chaining b) Backward Chaining c) Resolution Refutation d) Modus Pones	D

86)	An inference algorithm that derives only entailed sentences is called sound or truth-preserving. a) True b) False	A
87)	Which is not a property of representation of knowledge? a) Representational Verification b) Representational Adequacy c) Inferential Adequacy d) Inferential Efficiency	A
88)	‘α |= β ‘(to mean that the sentence α entails the sentence β) if and only if, in every model in which α is _____ β is also _____ a) True, true b) True, false c) False, true d) False, false	A
89)	A) Knowledge base (KB) is consists of set of statements. B) Inference is deriving a new sentence from the KB) Choose the correct option. a) A is true, B is true b) A is false, B is false c) A is true, B is false d) A is false, B is true	A
90)	What is the term used for describing the judgmental or commonsense part of problem solving? a) Heuristic b) Critical c) Value based d) Analytical	A
91)	What was originally called the "imitation game" by its creator? a)The Turing Test b)LISP c)The Logic Theorist d)Cybernetics	A
92)	A)M. turing developed a technique for determining whether a computer could or could not demonstrate the artificial Intelligence,, Presently, this technique is called a)Turing Test b)Algorithm c)Boolean Algebra d)Logarithm	A

93)	How is Fuzzy Logic different from conventional control methods? a)IF and THEN Approach b)FOR Approach c)WHILE Approach d)DO Approach	A
94)	Where does the degree of belief are applied? a)Propositions b)Literals c)Variables d)Statements	A
95)	Which variable cannot be written in entire distribution as a table? a)Discrete b)Continuous c)Both a & b d)None of the mentioned	B
96)	Where does the Bayes rule can be used? a)Solving queries b)Increasing complexity c)Decreasing complexity d)Answering probabilistic query	D
97)	What is the process of associating an FOL expression with a phrase? a)Interpretation b)Augument reality c)Semantic interpretation d)Augument interpretation	C
98)	What is the major component/components for measuring the performance of problem solving? a) Completeness b) Optimality c) Time and Space complexity d) All of the mentioned	D
99)	A production rule consists of _____ a) A set of Rule b) A sequence of steps c) Set of Rule & sequence of steps d) Arbitrary representation to problem	C

100)	Which is the best way to go for Game playing problem? a) Linear approach b) Heuristic approach (Some knowledge is stored) c) Random approach d) An Optimal approach	B

	Question Bank of CA 7.4 Advanced Java Programming(254704)	ANS
1)	When the ejbRemove method encounters a system problem ,it should throw_____ A. javax.ejb.NoSuchEntityException B. java.ejb.EJBException C. java.ejb.RemoveException D. javax.ejb.DuplicateKeyException	B
2)	Select the right method to read data from a file. A) get() B) readFileInput() C) scan() D) read()	D
3)	Which JSP block is used define class-wide variables and functions in the generated class file? A. scriplets B. expression C. element D. declarations	D
4)	Which of the following is not an implicit object? A. date B. request C. out D. pagecontext	A

5)	Which of these exceptions is thrown in cases when the file specified for writing is not found? A) IOException B) FileException C) FileNotFoundException D) FileInputException	C
6)	An Enterprise JavaBeans can be deployed in _____ A. J2EE server B. Weblogic C. Web sphere D. All of the above	D
7)	Mapping files (*.hbm.xml) is used _____ A. to map persistent objects to a relational database B. to configure the hibernate services (connection driver class, connection URL) C. to configure the hibernate services (connection username, connection password, dialect etc) D. All the above	A
8)	Which of the following is used to rollback a JDBC transaction? A) rollback() B) rollforward() C) deleteTransaction() D) RemoveTransaction()	A

9)	Consider the following HTML page code: < html >< body >< a href='/servlet/HelloServlet' >POST< /a >< /body >< /html > Which method of HelloServIet will be invoked when the hyperlink is clicked? A. doGet B. doPost C. doHref D. servicePost	A
10)	To determine the behaviour of the beans in an application , we make use of A. Java.beans.SimpleBeanInfo B. Java.beans.Introspector C. Java.awt.* D. None of the above	B
11)	Which of the elements defined within the taglib element of taglib descriptor file are required A. uri B. jsp-version C. display-name D. None	B
12)	Name the element within the tag element that defines the tag class that implements the functionality of tag Which element of tag defines the tag class that implements the tag's functionality? A. tag B. tag-uri C. tag-name D. tag-class	D

13)	What does setAutoCommit(false) do? A) commits transaction after each query B) explicitly commits transaction C) does not commit transaction automatically after each query D) never commits transaction	C
14)	_____ provides the ability to directly insert java into an HTML document A. declarations B. scriptlets C. directives D. None of the above	B
15)	----------beans would survive a server crash A. Stateful session beans B. Stateless session beans C. Entity beans D. Message-driven beans	C
16)	Which of the following statements are true about locating or using the home interface of a session bean A. Once acquired, the home interface can be used only once B. Each instance of a session bean has its own EJBHome object C. The InitialContext must be narrowed before it can be used to get the home interface D. None of the above	D

17)	Which of the following statements about Java Threads is correct? A) Java threads don't allow parts of a program to be executed in parallel B) Java is a single-threaded language C) Java's garbage collector runs as a high priority thread D) Ready, running and sleeping are three states that a thread can be in during its life cycle	D
18)	Which of the following statements are correct about a session bean whose class contains the following method? public void ejbCreate (String id) A. It is a Stateless session bean B. The home interface of the bean has the method create (String id) declared in it C. The component interface ofthe bean has the method ejbCreate (String id) declared in it D. None of the above	B
19)	What are valid methods for HttpSessionListener interface A. sessionRemoved B. sessionDestroyed C. sessionReCreated D. sessionReplaced	B
20)	Sites using HTTPS that is HTTP plus SSL(Secure Sockets Layer) can be identified by A. There is no way one can detect that site uses HTTPS protocol B. The URL of the website begins with https: instead of http C. The URL of the website begins with ssl: instead of http D. The URL of the website begins with shttp	B

21)	An object which implements the interfaces java.rmi.Remote and java.io.Serializable is being sent as a method parameter from one JVM to another. How would it be sent by RMI? A. RMI will serialize the object and send it B. RMI will send the stub of the object C. Either A or B Throws an exception D. None	B
22)	In the JMS, message producers and message consumers are created by which of the following objects? A. Connection Factories B. Message Listeners C. Connections D. Sessions	D
23)	Which of the following operators is used to generate instance of an exception which can be thrown using throw? A) thrown B) alloc C) malloc D) new	D
24)	To author a Session bean which of the following classes are needed? A. A Home interface, A Remote Interface, a class that implements Enterprisebean interface and a PrimaryKey class B. A Home interface, A Remote Interface and a class that implements the SessionBean interface C. A Remote Interface and a class that implements the SessionBean interface D. A Home interface, A Remote Interface and a class that implements the EnterpriseBean interface	B

25)	Which of the following statement is false regarding the exceptions in JDBC A. SQLWarning objects are a subclass of SQLException that deal with database access warnings B. Warnings stop the execution of an application, as exceptions do; they simply alert the user that something did not happen as planned C. Connection object has a getWarning() method in it D. Statement and ResultSet objects have getWarning() methods in it	B
26)	JDBC-ODBC Bridge does not work with Microsoft J++, because it does not support A. Java Native Interface B. JNDI C. JINI D. None of above	A
27)	In order to run JSP …….. is required. A) Mail Server B) Applet viewer C) Java Web Server D) Database connection	C
28)	Prepared Statement object in JDBC used to execute…….. queries. A) Executable B) Simple C) High level D) Parameterized	D

29)	Name the class that includes the getSession method that is used to get the HttpSession object A. HttpServletRequest B. HttpServletResponse C. SessionContext D. SessionConfig	A
30)	The EJB timer service is used for timing notifications. It can be used with A. CMP entity beans B. both BMP and CMP entity beans C. message-driven beans D. B and C	C
31)	In JDBC …… imports all Java classes concerned with database connectivity. A) javax.sql.* B) java.mysql.* C) java.sql.* D) com.*	C
32)	Which of the following classes can catch all exceptions which cannot be caught? A) RuntimeException B) Error C) Exception D) ParentException	B
33)	How can I use JDBC to create a database? A. Include create=true at end of JDBC URL B. Execute 'CREATE DATABASE jGuru' SQL statement C. Execute 'STRSQL' and 'CREATE COLLECTION jGuru' SQL statements D. Database creation is DBMS specific	D

34)	JSP embeds in …… in …… A) Servlet, HTML B) HTML, Java C) HTML, Servlet D) Java, HTML	D
35)	Which page directive attribute allows you to take care of possible thread conflicts? A. session B. extends C. buffer D. IsThreadSafe	D
36)	In the Model View Controller architecture of an enterprise application, which of the following can be 'best suited' as the Controller? A. Servlets B. Java Server Page C. Session Bean D. Option 1 and Option 3	D
37)	--------function is used to add elements in the vector at particular position A) add() B) addElement() C) AddElement() D) set()	B
38)	How constructor can be used for a servlet? A) Initialization B) Constructor function C) Initialization and Constructor function D) Setup() method	C

39)	What is the difference between servlets and applets? i. Servlets execute on Server; Applets execute on browser ii. Servlets have no GUI; Applet has GUI iii. Servlets creates static web pages; Applets creates dynamic web pages iv. Servlets can handle only a single request; Applet can handle multiple requests A) i, ii, iii are correct B) i, ii are correct C) i, iii are correct D) i, ii, iii, iv are correct	B
40)	The …… and ….. classes are abstract classes that support reading and writing of byte streams. A) reader, writer B) inputstream, outputstream C) objectinputstream, objectoutputstream D) none	B
41)	Which of these is the interface of legacy? A) Map B) Enumeration C) HashMap D) Hashtable	B
42)	Which method is used to get three-letter abbreviation for locale's country in servlets? A) Request.getISO3Country() B) Locale.getISO3Country() C) Response.getISO3Country() D) Local.retrieveISO3Country()	A

43)	Which of the following code retrieves the body of the request as binary data? A) DataInputStream data = new InputStream() B) DataInputStream data = response.getInputStream() C) DataInputStream data = request.getInputStream() D) DataInputStream data = request.fetchInputStream()	C
44)	When destroy() method of a filter is called? A) The destroy() method is called only once at the end of the life cycle of a filter B) The destroy() method is called after the filter has executed doFilter method C) The destroy() method is called only once at the begining of the life cycle of a filter D) The destroyer() method is called after the filter has executed	A
45)	Java support RMI. What does this RMI stand for? A) Random Memory Interface B) Remote Method Invocation C) Random Method Invocation D) Remote Memory Interface	B
46)	How is the dynamic interception of requests and responses to transform the information done? A) servlet container B) servlet config C) servlet context D) servlet filter	D
47)	Which of these are legacy classes? A) Stack B) Hashtable C) Vector D) All of the mentioned	D

48)	Which are the session tracking techniques? i. URL rewriting ii. Using session object iii. Using response object iv. Using hidden fields v. Using cookies vi. Using servlet object A) i, ii, iii, vi B) i, ii, iv, v C) i, vi, iii, v D) i, ii, iii, v	B
49)	Which of the following is used for session migration? A) Persisting the session in database B) URL rewriting C) Create new database connection D) Kill session from multiple sessions	A
50)	Which of the below is not a session tracking method? A) URL rewriting B) History C) Cookies D) SSL sessions	B
51)	Which of the following is stored at client side? A) URL rewriting B) Hidden form fields C) SSL sessions D) Cookies	D

52)	Which of the following leads to high network traffic? A) URL rewriting B) Hidden form fields C) SSL sessions D) Cookies	A
53)	Which of the following is not true about session? A) All users connect to the same session B) All users have same session variable C) Default timeout value for session variable is 20 minutes D) New session cannot be created for a new user	C
54)	Which of these methods is used to insert value and its key? A) put() B) set() C) insertElement() D) addElement()	A
55)	Which function is used to do session invalidate? A) session.discontinue() B) session.falsify() C) session.disconnect() D) session.invalidate()	D
56)	Which method creates unique fields in the HTML which are not shown to the user? A) User authentication B) URL writing C) HTML Hidden field D) HTML invisible field	C

57)	Which object is used by spring for authentication? A) ContextHolder B) SecurityHolder C) AnonymousHolder D) SecurityContextHolder	D
58)	Which page directive should be used in JSP to generate a PDF page? A) contentType B) generatePdf C) typePDF D) contentPDF	A
59)	------tag must be used to send data from JSP to included JSP. A) Using <%jsp:page> tag B) Using <%jsp:useBean> tag C) Using <%jsp:import> tag D) Using <%jsp:param> tag	D
60)	Application is instance of which class? A) javax.servlet.Application B) javax.servlet.HttpContext C) javax.servlet.Context D) javax.servlet.ServletContext	D
61)	How many JDBC driver types does Sun define? A) One B) Two C) Three D) Four	D

62)	Which one is the correct order of phases in JSP life cycle? A) Initialization, Cleanup, Compilation, Execution B) Initialization, Compilation, Cleanup, Execution C) Compilation, Initialization, Execution, Cleanup D) Cleanup, Compilation, Initialization, Execution	C
63)	Which JDBC driver Type(s) can be used in either applet or servlet code? A) Both Type 1 and Type 2 B) Both Type 1 and Type 3 C) Both Type 3 and Type 4 D) Type 4 only	C
64)	request is the object of -------class. A) HttpServletRequest B) HttpRequest C) Request D) ServletRequest	A
65)	Which is not a directive? A) include B) page C) export D) useBean	C
66)	What is not true of a Java bean? A) There are no public instance variables. B) All persistent values are accessed using getxxx and setxxx methods. C) It may have many constructors as necessary. D) All of the above are true of a Java bean.	C

67)	Which one of the following is correct for directive in JSP? A) <%@directive%> B) <%!directive%> C) <%directive%> D) <%=directive%>	A
68)	-------is used to include the file in JSP? A) jsp:include B) jsp:getProperty C) jsp:setProperty D) jsp:plugin	A
69)	Which of the below does not implement Map interface? A) HashMap B) Hashtable C) EnumMap D) Vector	D
70)	A JSP is transformed into a(n): A) Java applet B) Java servlet C) Either 1 or 2 above D) Neither 1 nor 2 above	B
71)	“out” is implicit object of which class? A) javax.servlet.jsp.PrintWriter B) javax.servlet.jsp.SessionWriter C) javax.servlet.jsp.SessionPrinter D) javax.servlet.jsp.JspWriter	D

72)	What programming language(s) or scripting language(s) does Java Server Pages (JSP) support? A) VBScript only B) Jscript only C) Java only D) All of the above are supported	C
73)	What temporarily redirects response to the browser? A) <jsp:forward> B) <%@directive%> C) response.sendRedirect(URL) D) response.setRedirect(URL)	C
74)	Which tag is used to set a value of a JavaBean? A) <c:set> B) <c:param> C) <c:choose> D) <c:forward>	A
75)	In JSP -------- is not a directive. A) page directive B) command directive C) taglib directive D) include directive	B
76)	Which of the below is not a javascript framework for UI? A) Vaadin B) AngularJS C) KendoUI D) Springcore	D

77)	Which of these is a process of writing the state of an object to a byte stream? A) Serialization B) Externalization C) File Filtering D) All of the mentioned	A
78)	Which of these processes occur automatically by the java runtime system? A) Serialization B) Garbage collection C) File Filtering D) All of the mentioned	A
79)	DataOutput interface is extended by---------- A) ObjectOutput B) Externalization C) Serializable D) ObjectInput	A
80)	Which of these is a method of ObjectOutput interface used to finalize the output state so that any buffers are cleared? A) clear() B) flush() C) fflush() D) close()	B
81)	What servlet processor was developed by Apache Foundation and Sun? A) Apache Tomcat B) Apache Web server C) Sun servlet processor D) None of the above is correct.	A

82)	What type of protocol is HTTP? A) stateless B) stateful C) transfer protocol D) information protocol	A
83)	Which of these standard collection classes implements a dynamic array? A) AbstractList B) LinkedList C) ArrayList D) AbstractSet	C
84)	Which of these classes can generate an array which can increase and decrease in size automatically? A) ArrayList() B) DynamicList() C) LinkedList() D) MallocList()	A
85)	How can we take input text from user in HTML page? A) input tag B) inoutBufferedReader tag C) meta tag D) scanner tag	A
86)	Which of these methods can be used to increase the capacity of ArrayList object manually? A) Capacity() B) increaseCapacity() C) increasecapacity() D) ensureCapacity()	D

87)	---------function of ArrayList class is used to getcurrent size. A) index() B) length() C) size() D) capacity()	C
88)	How can we connect to database in a web application? A) oracle sql developer B) toad C) JDBC template D) mysql	C
89)	What is invoked via HTTP on the Web server computer when it responds to requests from a user's Web browser? A) A Java application B) A Java applet C) A Java servlet D) None of the above is correct.	C
90)	Which of these keywords is not a part of exception handling? A) try B) finally C) thrown D) catch	C
91)	--------keyword need be utilized to monitor an exception. A) throw B) finally C) try D) catch	C

92)	Which of these keywords must be used to handle the exception thrown by try block in some rational manner? A) try B) finally C) throw D) catch	D
93)	How are java web applications packaged? A) jar B) war C) zip D) both jar and war	D
94)	To manually throw an exception --------keyword is used. A) throw B) finally C) try D) catch	A
95)	What is multithreaded programming? A) It's a process in which two different processes run simultaneously B) It's a process in which two or more parts of same process run simultaneously C) It's a process in which many different process are able to access same information D) It's a process in which a single process can access information from many sources	B
96)	Thread priority in Java is? A) Integer B) Float C) double D) long	A

97)	In the web application, servlet resides in------- A) client B) applet C) tomcat D) server	D
98)	How many copies of a JSP page can be in memory at a time? A) One B) Two C) Three D) Unlimited	A
99)	What is true about threading? A) run() method calls start() method and runs the code B) run() method creates new thread C) run() method can be called directly without start() method being called D) start() method creates new thread and calls code written in run() method	D
100)	Which of the following is a correct constructor for thread? A) Thread(Runnable a, String str) B) Thread(int priority) C) Thread(Runnable a, int priority) D) Thread(Runnable a, ThreadGroup t)	A

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	Question Bank of CA-7.5 ADBMS(254705)	ANS
1)	In a _____ clustering index, the index record contains the search-key value and a pointer to the first data record with that search-key value and the rest of the records will be in the sequential pointers. A) SparseB) DenseC) StraightD) Continuous	B
2)	A key that consists of more than one attribute to uniquely identify rows in a table is called A) Composite key B) Candidate key C) Primary key D) Foreign key	A
3)	Which one is true about clustered index? A) Clustered index is not associated with table B) Clustered index is built by default on unique key columns C) Clustered index is not built on unique key columns D) None of the mentioned	B
4)	When the _____ the backup site takes over processing and becomes the primary. A) Secondary fails B) Backup recovers C) Primary fails D) None of the mentioned	C
5)	In hierarchical model, data is organized into A) logical structure B) physical structure C) tree like structure D) none of them	C
6)	FDBS stands for_____ A) Federated database system B) Featured database system C) First database system D) none of the above	A
7)	A heterogeneous distributed database is which of the following? A) The same DBMS is used at each location and data are not distributed across all nodes. B) The same DBMS is used at each location and data are distributed across all nodes. C) A different DBMS is used at each location and data are not distributed across all nodes. D) A different DBMS is used at each location and data are distributed across all nodes.	D

8)	DDL stands for _____ A) data definition language B) data description language C) data definition list D) none of the above	A
9)	WAL stands for _____ A) Write After Logging B) Write Ahead Logging C) Watch After Logging D) none of the above	B
10)	The _____operation performs a set union of two "similarly structured" tables A) Union B) Join C) Product D) Intersect	A
11)	Using which language can a user request information from a database? A) Query B) Relational C) Structural D) Compiler	A
12)	In Oracle, the end of the transaction is recorded in the …….. files. A) Data B) Control C) Redo Log D) Password	C
13)	For each attribute of a relation, there is a set of permitted values, called the _____ of that attribute. A) Set B) Relation C) Domain D) Schema	C
14)	DBA is responsible for _____ A) Account creation B) Privilege granting C) Privilege revocation D) All of the above	D

15)	What is DES ? A) Data Entity standard B) Data Encryption Standard C) Direct Encryption Standard D) All of the above	B
16)	Which of the following is /are Security Issues? A) Legal and ethical issues B) Policy issues C) System-related issues D) All of the above	D
17)	Data items grouped together for storage purposes are called a : A) record B) title C) list D) string	A
18)	Which of the different ways for handling recovery? A) Steal/No-Force (Undo/Redo) B) Steal/Force (Undo/No-redo) C) No-Steal/No-Force (Redo/No-undo) D) All of the above	D
19)	The_____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple. A) Select B) Join C) Union D) Intersection	B
20)	Storage devices like magnetic disk comes under A) Volatile storage B) Non-volatile storage C) Stable storage D) Dynamic storage	B
21)	The term _____ is used to refer to a row. A) AttributeB) Field C) TupleD) Instance	C
22)	_____provides enterprise-wide connectivity solutions in distributed, heterogeneous computing environments A) Online new server B) Oracle Net Services C) Online Net Solutions D) none of the above	B

23)	ARIES uses a _____ to identify log records, and stores it in database pages. A) Log sequence number B) Log number C) Lock number D) Sequence	B
24)	An abstraction concept for building composite object from their component object is called : A) Specialization B) Normalization C) Aggregation D) Generalization	C
25)	An active database allows users to make the following changes to triggers A) ActivateB) DeactivateC) DropD) All of the above	D
26)	ADBMS stands for _____ A) Advanced DBMS B) Automatic DBMS C) Anti DBMS D) none of the above	A
27)	Which of the follow is not the degree of relationship? A) SingleB) BinaryC) TernaryD) n-ary	A
28)	Which of the following is not a type of Data Update A) Immediate Update B) Deferred Update C) Shadow Update D) Inferred Update	D
29)	Immediate database modification technique uses A) Both undo and redo B) Undo but no redo C) Redo but no undo D) Neither undo nor redo	A
30)	Tape storage is referred to as _____ storage. A) Direct-access B) Random-access C) Sequential-access D) All of the mentioned	C

31)	The disk controller uses _____ at each sector to ensure that the data is not corrupted on data retrieval. A) Checksum B) Unit drive C) Read disk D) Readsum	A
32)	Which one of the following design is both software and hardware independent ? A) Logical B) Physical C) Conceptual D) None of the above	C
33)	DML stands for _____ A) data manipulation language B) data mutation language C) data master list D) none of the above	A
34)	Remote backup system must be _____ with the primary site. A) Synchronised B) Separated C) Connected D) Detached but related	A
35)	The term attribute refers to a _____ of a table. A) Record B) Column C) Tuple D) Key	B
36)	The remote backup site is sometimes also called the A) Primary Site B) Secondary Site C) Tertiary Site D) None of the mentioned	B
37)	Which of the following is/are Design decisions about indexing A) Whether to index an attribute? B) What attribute or attributes to index on? C) Whether to set up a clustered index? D) All of the above	D

38)	A schema describes : A) Record Relationship B) Data Elements C) Record and files D) All of the above	D
39)	In B+ tree the node which points to another node is called A) Leaf node B) External node C) Final node D) Internal node	D
40)	_____ refers to the correctness and completeness of the data in a database? A) Data security B) Data integrity C) Data constraint D) Data independence	B
41)	The syntax of a user query is verified by : A) query optimizer B) DBA C) parser D) none of the above	C
42)	The …… consists of physical files and memory components. A) Oracle Client B) Oracle Server C) Oracle Middleware D) Oracle Instance	B
43)	Shadow paging has A) no redo B) no undo C) redo but no undo D) neither redo nor undo	A
44)	The backup is taken by A) Erasing all previous records B) Entering the new records C) Sending all log records from primary site to the remote backup site D) Sending selected records from primary site to the remote backup site	C

45)	Which of following are the properties of entities ? A) Groups B) Table C) Attributes D) Switchboards	C
46)	Which one is lowest level data model ? A) physical data model B) logical data model C) external data model D) none of the above	A
47)	RAID is _____ A) Redundant Arrays of Inexpensive Display B) Redundant Arrays of expensive Disks C) Redundant Arrays of Inexpensive Disks D) none of the above	C
48)	Course(course_id,sec_id,semester) Here the course_id,sec_id and semester are _____ and course is a _____ A) Relations, Attribute B) Attributes, Relation C) Tuple, Relation D) Tuple, Attributes	B
49)	Which of the following is/are Types of multimedia data? A) Graphics B) Image C) Animation D) All of the above	D
50)	The database may become unavailable for use due to _____ A) Transaction Failure B) System Failure C) Media Failure D) All of the above	D

51)	A hash function must meet _____ criteria. A) Two B) Three C) Four D) None of the mentioned	B
52)	In ordered indices the file containing the records is sequentially ordered, a _____ is an index whose search key also defines the sequential order of the file. A) Clustered index B) Structured index C) Unstructured index D) Nonclustered index	A
53)	In Oracle Database …….. Contain the data dictionary and user created data. A) Data Files B) Control Files C) Redo Log Files D) Password Files	A
54)	Which of the following is not an advantage of B-Tree Index Files A) Lack of redundant storage B) Some searches are faster C) Leaf and non-leaf nodes are of different size D) All of the above	C
55)	An organization comprising a database system usually includes a person called as _____ A) system administrator.B)database administrator C)office administrator D) oracleadministrator	B
56)	The time to process the remote backup can be reduced by A) Flags B) Breakpoints C) Redo points D) Checkpoints	D
57)	Which of the following Problems to be considered in tuning: A) How to avoid excessive lock contention? B) How to minimize overhead of logging and unnecessary dumping of data? C) How to optimize buffer size and scheduling of processes? D) All of the above	D

58)	The _____ is that part of main memory available for storage of copies of disk blocks. A) Buffer B) Catalog C) Storage D) Secondary storage	A
59)	A data model is : A) Used to describe structure of a database B) Set of basic operations on the database C) Both [A] and [B] D) None of the above	C
60)	For a transaction to be durable, its changes need to be written to _____ storage. A) Volatile storage B) Non-volatile storage C) Stable storage D) Dynamic storage	C
61)	Which of the following Operations can be performed on Files A) Open B) Read C) Delete D) All of the above	D
62)	What is the main limitation of Hierarchical Databases? A) Limited capacity (unable to hold much data) B) Limited flexibility in accessing data C) Overhead associated with maintaining indexes D) The performance of the database is poor	B
63)	Object which is distinguishable from other objects by specific set of attributes is called as _____. A) Entity B) None of these C) Attributes D) Classes	A
64)	For correct behaviour during recovery, undo and redo operation must be A) Commutative B) Associative C) Idempotent D) Distributive	C

65)	If any tampering with the database is suspected, a database _____is performed. A) audit B) Rollback C) Lock D) none of the above	A
66)	Which of the following is/are Threats to databases A) Loss of integrity B) Loss of availability C) Loss of confidentiality D) All of the above	D
67)	The process of saving information onto secondary storage devices is referred to as A) Backing up B) Restoring C) Writing D) Reading	C
68)	Which of the following is not a level of data abstraction? A) Physical Level B) Critical Level C) Logical Level D) View Level	B
69)	A data dictionary is a special file that contains? A) The names of all fields in all files B) The data types of all fields in all files C) The widths of all fields in all files D) All of the mentioned	D
70)	The …… consists of the memory components of Oracle and various background processes. A) Oracle Parameter B) Oracle Profile C) Oracle Process D) Oracle Instance	D
71)	A logical description of some portion of database that is required by a user to perform task is called as A) System View B) User View C) Logical View D) Data View	B

72)	Which of the following is not a Schema? A) Database Schema B) Physical Schema C) Critical Schema D) Logical Schema	C
73)	_____enables you to configure Oracle Net Services A) Oracle Net Manager B) Online net manager C) Both A) and B) D) none of the above	A
74)	Which of the following is a physical storage media? A) Tape Storage B) Optical Storage C) Flash memory D) All of the mentioned	D
75)	A _____ is a pictorial depiction of the schema of a database that shows the relations in the database, their attributes, and primary keys and foreign keys. A) Schema diagram B) Relational algebra C) Database diagram D) Schema flow	A
76)	A relational database consists of a collection of A) Tables B) Fields C) Records D) Keys	A
77)	Data Models in DBMS are classified into _____ categories. A) 5 B) 3 C) 2 D) 4	B
78)	Which one of the following is not an object-based logical model ? A) The binary model B) The entity-relational model C) The infological model D) None of these	C
79)	In a _____ index, an index entry appears for only some of the search-key values. A) Dense B) Sparse C) Straight D) Continuous	A

80)	Which of the following is/are type of hashing A) Internal Hashing B) External Hashing C) Both A) and B) D) none of the above	C
81)	In magnetic disk _____ stores information on a sector magnetically as reversals of the direction of magnetization of the magnetic material. A) Read–write head B) Read-assemble head C) Head–disk assemblies D) Disk arm	D
82)	_____ is the time from when a read or write request is issued to when data transfer begins. A) Access time B) Average seek time C) Seek time D) Rotational latency time	A
83)	Which of the following is /are Countermeasures for DB security? A) access control B) inference control C) flow control D) All of the above	D
84)	Data about data is normally termed as : A) directory B) Data abnk C) MetaData D) none of the above	C
85)	What is RBAC in Database Security? A) Role-based access control B) Rule-based access command C) Role-based active control D) none of the above	A

86)	Database _____ which is the logical design of the database, and the database _____ which is a snapshot of the data in the database at a given instant in time. A) Instance, Schema B) Relation, Schema C) Relation, Domain D) Schema, Instance	D
87)	A _____ in a table represents a relationship among a set of values. A) Column B) Key C) Row D) Entry	C
88)	The scheme for hierarchical database is : A) a tree B) a graph C) a B-tree D) none of the above	A
89)	The level of data abstraction which describes how the data is actually stored is : A) conceptual level B) physical level C) file level D) none of these	B
90)	A _____ is the smallest unit of information that can be read from or written to the disk. A) Track B) Spindle C) Sector D) Platter	C
91)	DBA stands for : A) Data Bank Access B) Database Access C) Data Bank Administration D) Database Administrator	D
92)	The log is a sequence of _____ recording all the update activities in the database. A) Log records B) Records C) Entries D) Redo	A

93)	Collection of information stored in a database at a particular moment is : A) view B) schema C) instance D) none of the above	A
94)	Key value pairs is usually seen in A) Hash tables B) Heaps C) Both Hash tables and Heaps D) Skip list	A
95)	One of the following is a valid record-based data model : A) Object-oriented model B) Relational model C) Entity-relationship model D) None of the above	B
96)	Which of the following is not a type of index A) primary index B) Dense Index C) Sparse Index D) High Index	D
97)	Manager's salary details are hidden from the employee. This is : A) Conceptual level data hiding B) Physical level data hiding C) External level data hiding D) None of these	A
98)	A technique for direct search is A) Binary Search B) Linear Search C) Tree Search D) Hashing	D
99)	The method in which records are physically stored in a specified order according to a key field in each record is A) Hash B) Direct. C) Sequential D) All of the above.	A

100)	The property that uniquely defines each row in a table is called the: A) Identifier B) Index C) Primary key D) Symmetric key	C

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	Question Bank of CA 8.1 Software Project Management(254801)	ANS
1)	Assembling project team and assigning their responsibilities are done during which phase of a project management? A) Initiation B) Planning C) Execution D) Closure	A
2)	Determining the method and the timing of releasing team members should be included in the— A) Staff acquisition plan B) Human resource plan C) Staffing management plan D) Project training plan	C
3)	The nature of a project is A) Permanent B) temporary C) (A) or (B) D) Both (A) and (B)	B
4)	A process that involves continuously improving and detailing a plan as more detail become available is termed as A) project analysis B) project enhancing C) progressive deliberation D) progressive elaboration	D
5)	Which from the following statement(s) is/are NOT true? I. Projects have defined objectives II. Programs have a larger scope than projects III. The projects and programs in a portfolio must be directly related A) I only B) II only C) III only D) II and III only	C

6)	Which from the following represents the correct project cycle? A) Planning→Initiating→Executing→Closing B) Planning→Executing→Initiating→Closing C) Initiating→Planning→Executing→Closing D) Initiating→Executing→Planning→Closing	C
7)	A horizontal bar chart that shows project tasks against a calendar is known as A) Gantt chart B) goal C) milestone D) PERT chart	A
8)	By which of these techniques, the most long-lasting conflict resolution is caused? A) Smoothing B) Forcing C) Compromising D) Confrontation	D
9)	The statistical tool that depicts a project's tasks and the relationships between those tasks is known as A) milestone B) goal C) Gantt chart D) PERT chart	D
10)	Which of below is not a part of project management? A) Initiating B) monitoring C) closing D) All above are parts	D
11)	The business case and the justification for the project is determined during the _____ phase. A) Initiation B) planning C) execution D) closure	A

12)	In which phase of the project management, scope of the work is defined? A) Executing B) Planning C) Initiating D) Closing	C
13)	How the project work will be carried out, monitored, and controlled? These questions are answered in which phase of the project management? A) Initiating B) Planning C) Executing D) Closing	B
14)	The key way for a project manager to promote optimum team performance in project teams whose members are not collocated is to— A) Build trust B) Establish a reward and recognition system C) Obtain the support of the functional managers in the other locations D) Exercise his or her right to control all aspects of the project	A
15)	The review of the successes and the mistakes is normally held during _____ phase. A) Initiation B) planning C) execution D) closure	D
16)	The process each manager follows during the life of a project is known as A) Project Management B) Manager life cycle C) Project Management Life Cycle D) All of the mentioned	C

17)	Which of the following is/are main parameters that you should use when computing the costs of a software development project? A) Travel and training costs B) hardware and software costs C) effort costs (the costs of paying software engineers and managers) D) all of the mentioned	D
18)	Quality planning is the process of developing a quality plan for A) team B) project manager C) customers D) project	D
19)	Which of the following is not correct about initial phase of a project? A) The cost associated at the beginning of the project is highest. B) Stakeholders have maximum influence during this phase C) The highest uncertainty is at this stage of the project. D) All the above statements are correct.	A
20)	Project managers have the highest level of authority and the most power in which type of organizational structure? A) Projectized B) Strong Matrix C) Functional D) Balanced Matrix	A
21)	The chances for successful completion of a multidisciplinary project are increased if project team members are— A) Problem oriented B) Politically sensitive to top management's needs C) Focused on individual project activities D) Focused on customer demands	A

22)	What is one of the most important skills a project manager can have? A) Negotiation skills B) Influencing skills C) Communication skills D) Problem Solving skills	C
23)	Which of the following contracts should you use for projects that have a degree of uncertainty and require a large investment early in the project life cycle? A) Fixed Price B) Cost Reimbursable C) lump Sum D) Unit Price	B
24)	A Project manager would find team development the most difficult in which form of organization? A) Weak Matrix Organization B) Balanced Matrix Organization C) Projectized Organization D) Tight Matrix Organization	A
25)	Software systems are likely to be subject to a high degree of _____. A) Performance B) Change C) Time D) Strength	B
26)	In case of product-driven projects, the objectives of the project are defined in terms of _____. A) Functional requirements only B) Resource and non-functional requirements C) Functional and quality requirements D) Resource requirements only	C

27)	Quality requirements consist of_____. A) Reliability. B) Ease of using the system. C) Response time. D) All the above.	D
28)	Which of the following is tabular illustration of the anticipated risks in a project? A) Time Table B) Assessment Table C) Risk Table D) Round Table	C
29)	Two team members on your project often disagree. You need a conflict resolution method that provides a long-term resolution. You decide to use which one of the following approaches? A) Confronting B) Problem solving C) Collaborating D) Smoothing	C
30)	In order to carry out a successful strategic assessment of a potential project there should be strategic plan clearly defining the organization's _____. A) Objectives B) Rules C) Conditions D) Ideas	A

31)	Which one of the following statements best describes a project? A) A project is a set of tools and techniques often used when delivering organizational change. B) A project is the sum of activities needed to remove uncertainty from a unique piece of work. C) A unique transient endeavor undertaken to achieve a desired outcome. D) A project is a method of planning work.	C
32)	The document that identifies what information needs to be shared, to whom, why, when and how is called the: A) Communication management plan. B) Stakeholder mapping grid. C) Document distribution schedule. D) Responsibility assignment matrix.	A
33)	What are Requirements refined and analyzed to assess their clarity, completeness, and_____ A) Consistency B) Correctness C) Concurrency D) None of these	A
34)	If the Earned Value is equal to Actual Cost, it means: A) Project is on budget and on schedule B) Schedule Variance Index is 1 C) There is no schedule variance D) There is no cost variance	D
35)	Which of the following is the most important element of Project Management Plan that is useful in HR Planning process? A) Risk Management activities B) Quality Assurance activities C). Activity Resource requirements D) Budget Control activities	C

36)	Which of the following is the reason that software is delivered late? A) Changing customer requirements that are not reflected in schedule changes B) Technical difficulties that could not have been foreseen in advance C) Human difficulties that could not have been foreseen in advance D) All of the mentioned	D
37)	Which of the following is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks? A) Software Macroscopic schedule B) Software Project scheduling C) Software Detailed schedule D) None of the mentioned	B
38)	Every task that is scheduled should be assigned to a specific team member is termed as A) Compartmentalization B) Defined milestones C) Defined responsibilities D) Defined outcomes	C
39)	The main objective for investing money, time in the event is to increase — A) Quality B) Morale C) Team performance D) Individual performance	C
40)	What is a collection of software engineering work tasks, milestones, and deliverables that must be accomplished to complete a particular project? A) Task set B) Degree of milestone C) Adaptation criteria D) All of the mentioned	A
41)	Ensuring that no more than the allocated numbers of people are allocated at any given time in Software Scheduling is known as A) Time Allocation B) Effort Validation C) Defined Milestone D) Effort Distribution	B

42)	Which of the following is not an adaptation criteria for software projects? A) Size of the project B) Customers Complaints C) Project staff D) Mission criticality	B
43)	The primary result of effective team development is— A) Improved project performance B) An effective, smoothly running team C) An understanding by project team members that the project manager is ultimately responsible for project performance D) Enhancement of the ability of stakeholders to contribute as individuals and team members	A
44)	Which of the following is a project scheduling method that can be applied to software development? A) PERT B) CPM C) CMM D) Both PERT and CPM	D
45)	The standard way of evaluating the economic benefits of any projects is to carry out a _____ analysis. A) price-benefit. B) cost-benefit. C) Cash flow. D) Fund flow.	B
46)	Which of the below elements contributes the maximum to team communication? A) External feedback B) Collection C) Smoothing over of team conflicts by the project manager D) Performance appraisals	B

47)	The costs that include the salaries and other employment costs of the staff involved in the development project and all associated costs are_____. A) Operational cost. B) Development cost. C) Setup cost D) Direct cost.	B
48)	Long term or benefits that are considered very difficult to quantify is called _____. A) Direct benefits B) Assessable benefits. C) Indirect benefits. D) Intangible benefits	D
49)	The availability of staff and experience will be under _____. A) Process uncertainty. B) Product uncertainty. C) Resource uncertainty. D) Profit uncertainty.	C
50)	PERT analysis is based on A) Most likely time B) Pessimistic time C) Optimistic time D) All of these.	D
51)	Which of the option is not a notable challenge while scheduling a project? A) Deadlines exist. B) Independent activities. C) Too many workers may be required. D) Costly delay	B

52)	The specific work performance in CPM is called as A) Activity B) Event C) Dummy D) Contract.	A
53)	The critical path A) Is the longest path B) Is a mixture of all paths. C) Is a path that operates from the starting node to the end node D) Is the shortest path	A
54)	Which of the following is a ground rule for project team building? A) Perform frequent performance appraisals B) Ensure that each team member reports to his or her functional manager in addition to the project manager C) Start early D) Try to solve team political problems	C
55)	Completion of a CPM network diagram activity is commonly known A) Connector B) Event C) Node D) All the above.	D
56)	While scheduling a project by CPM A) A project is divided into various activities B) Required time for each activity is established C) A sequence of various activities is made according to their importance D) All the above.	D

57)	An important aim of a post-project review is to: A) Validate overall progress to date against the budget and schedule. B) Capture learning and document it for future usage. C) Ensure acceptance of all permanent documentation, signed by the sponsor. D) Establish that project benefits have been identified.	B
58)	The process that evaluates overall project performance to provide confidence is called: A) Quality assurance. B) Quality planning. C) Quality control. D) Quality audit.	A
59)	Each component of the software product is separately estimated and the results aggregated to produce an estimate for the overall job. A) Algorithmic model B) Expert judgment C) Bottom-up D) Top down	C
60)	Process Analysis is a task of A) Process Improvement Plan B) Quality Metrics C) Performance Analysis D) Quality Improvement Plan	A
61)	Root Cause Analysis relates to A) Quality Control Measurements B) Quality Audits C) Process Analysis D) Performance Measurements	C

62)	A planning phase for an engineering component generated 80 engineering drawings. The QA team randomly selected 8 drawings for inspection. This exercise can BEST be described as example of: A) Inspection B) Statistical Sampling C) Flowcharting D) Control Charting	B
63)	Which one of the following is captured in the Work Breakdown Structure (WBS)? A) The life cycle phases. B) The logical order of tasks. C) The scope of the project. D) Project costs.	C
64)	Project reporting can best be defined as: A) Informing stakeholders about the project. B) Storing and archiving of project information. C) Gathering stakeholder feedback. D) Collecting project information.	A
65)	Which one of the following statements best defines an estimate? A) An approximation of project time and cost targets, refined throughout the project life cycle. B) A prediction of a future condition or event based on information or knowledge available now. C) The value of useful work done at any given point in a project to give a measure of progress. D) A situation that affects or influences the outcome of the project expressed in time or cost terms.	A

66)	During which stage of Risk planning is risks prioritized based on probability and impact? A) Identify Risks B) Plan Risk responses C) Perform Qualitative risk analysis D) Perform Quantitative risk analysis	C
67)	The objective of _____ is to avoid or minimize the adverse effects of unforeseen events is called A) Risk management. B) Risk maintenance. C) Risk taking. D) Risky job.	A
68)	_____ = risk likelihood x risk impact. A) Risk estimate. B) Risk expenditure. C) Risk identification D) Risk exposure.	D
69)	The impact of some risks can be transferred away from the project by _____. A) Risk analysis. B) Risk control. C) Risk transfer. D) Risk evaluation.	C
70)	A _____ is any item or person required for the execution of the project. A) Risk. B) Allocation. C) Activity. D) Resource	D

71)	Controlling the changes in the project might disturb A) Project scope B) Stage cost C) The progress of the project D) All of these	D
72)	Cost schedule of an activity plan is represented as A) Sequence of steps. B) Descending steps. C) Ascending steps. D) Reverse steps	A
73)	The process of Control Procurements belongs to A) Monitoring and Control B) Closing C) Planning D) Executing	A
74)	What is defined as “the ability to influence and align others towards a common purpose”? A) Teamwork. B) Motivation. C) Management. D) Leadership.	D
75)	Which one of the following statements about the project risk register is false? A) It facilitates the review and monitoring of risks. B) It facilitates the risk appetite. C) It facilitates the recording of risk responses. D) It facilitates the recording of risks.	B

76)	Which one of the following statements best defines procurement? A) A technique to establish the best approach for obtaining the resources for the project. B) A group of interrelated resources and activities that transform inputs into outputs. C) The description of the purpose, form and components to support delivery of a product. D) The process by which products and services required for the project are acquired.	D
77)	Which is next step in change control process, once a change has been demanded? A) Update the change log. B) Advise the sponsor. C) Evaluate the change. D) Update the project plan.	C
78)	Which one of the following best describes project success criteria? A) Actively seeking some senior management support. B) Measures by which the success of the project is judged. C) Achievement of milestones. D) A motivated project team.	B
79)	For project risk, -----has decisive responsibility. A) Project sponsor. B) Risk owner. C) Steering group D) Project manager.	A
80)	When a project has completed the handover and closure phase: A) The project deliverables are ready for commissioning. B) The project deliverables are ready for handing over to the users. C) The project documentation must be disposed of. D) The capability is now in place for the benefits to be realized.	D

81)	A main aspect of managing a project includes A) Defining which operational systems to put in place. B) Planning to achieve defined objectives. C) Ensuring ongoing operations are maintained. D) Identifying routine tasks.	B
82)	Which one of the following statements best defines teamwork? A) People working collaboratively towards a common goal. B) Developing skills that will enhance project performance. C) Gathering the right people together to work on a project. D) Establishing vision and direction towards a common purpose.	A
83)	The main aim of a project risk management process should be to: A) Identify project risks and then manage them appropriately. B) Identify all project risks and transfer them immediately. C) Identify all the things that are threats or opportunities on a project. D) Satisfy the organization's project management process.	A
84)	The fixed price contract is advantageous to the buyer because it: A) Requires extremely well defined specifications B) Requires formal procedures for scope changes C) Seller assumes financial and technical risk D) Has a known cost	C
85)	The contract administration job comprises: A) Performance control B) Managing relationships and interfaces C) Funding management D) All of these	D

86)	The tools and techniques used in the process of Plan Procurement Management includes all but A) Make-or-buy analysis B) Market Research C) Bidder Conferences D) Expert Judgment	C
87)	Following is (are) the tool(s) for changing a process A) Change Management System (CMS) B) Configuration Management (CM) C) Both (A) and (B) D) None of the above	C
88)	Which is the last item a project manager should do to finalize the project closing? A) Reassign the team B) Complete lessons learned C) Archive the project records D) Contract completion	D
89)	The inputs utilized in the process of Conduct Procurements comprises all excluding A) Seller Proposals B) Agreements C) Source Selection Criteria D) Procurement statement of work	B

90)	The component of the project management plan that describes how a project team will acquire goods and services from outside the performing organization is called A) Procurement Management Plan B) Procurement Statement of Work C) Procurement Documents D) None of the above	A
91)	To have a legally binding contract, which of the following items must be present? A) Offer and Consideration B) Offer and Acceptance C) Offer, acceptance, consideration, capacity by both parties to contract, and a legal purpose D) A meeting of the minds	C
92)	A manager that manages a collection of associated projects is known as A) Project manager. B) Program manager. C) Program coordinator. D) Project expediter.	B
93)	Two types of change management are A)Real change and superficial change B) Incremental change and transformational change C) Radical change and transformational change D) Incremental change and circular change	B
94)	The possibility of finishing the project in the initial phase is ___ A) Low B) High C) Zero D) Any of the above	A

95)	A change agent------- A) Supports change B) Helps implement change C) Initiates change D) Opposes change	B
96)	The three stages of the change process are: A) unfreezing, adjustment, and refreezing B) Adjustment, unfreezing and refreezing C) Adjustment, unfreezing and re-adjustment D) Adjustment, re-adjustment and unfreezing	A
97)	Transformational change is often done A) By middle managers B) After extensive consultation C) Bottom up D) Top down	D
98)	Five dimensions that must be managed on a project A) Constraint, Quality, Cost, Schedule, Staff B) Features, Quality, Cost, Schedule, Staff C) Features, priority, Cost, Schedule, Staff D) Features, Quality, Cost, Schedule, customer	B
99)	Project performance comprises of A) Quality B) Cost C) Time D) All of these	D

100)	The probability of completing the project can be estimated based upon the ____. A) Uniform distribution curve B) Normal distribution curve. C) U-shaped distribution curve D) None of the above	B

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	Question Bank of CA 8.2 Internet Computing(254802)	ANS
1)	menus, tree view and sitemap path controls cannot be styled with CSS - a. True b. False	b.
2)	Every server control must have an id a. True b. False	a.
3)	Which of the following object is not as ASP component. a. Counter b. AdRotator c. LinkCounter d. File Access	c.
4)	Which of the following tool is used to manage the GAC. a. RegSvr.exe b. GacUtil.exe c. GacSvr32.exe d. Gacmgr.exe	b.
5)	_____ is the code mixed with the HTML and asp controls called? a. inline code b. bar code c. both 1 & 2 d. both a and b	a.

6)	We can manage states in asp.net application using a. Session Objects b. Application Objects c. Viewstate d. All of the above	d.
7)	Attribute must be set on a validator control for the validation to work. a. ControlToValidate b. ControlToBind c. ValidateControl d. Validate	a.
8)	_____ is not an ASP.NET page event. a. Load b. Init c. Import d. All of the mentioned	c.
9)	File extension used for ASP.NET files. a. .Web b. .ASP c. .ASPX d. None of the above	b.

10)	File extension used for ASP.NET Page. a. .Web b. .ASP c. .ASPX d. None of the above	c.
11)	How do you get information from a form that is submitted using the "post" method? a. Request.QueryString b. Response.writeln c. Response.write d. Request.Form	d.
12)	ASP.NET was first released in a. January 2003 b. January 2002 c. Feb 2002 d. January 2001	b.
13)	Which of the following object is used along with application object in order to ensure that only one process accesses a variable at a time? a. Synchronize b. Synchronize() c. ThreadLock d. Lock()	b.

14)	Which of the following authentication is best suited for a corporate network? a. Windows b. Form c. User d. All	a
15)	By default, code written with the Debug class is stripped out of release builds. a. Yes b. No	a.
16)	The .NET Framework provides a runtime environment called..... ? a. RMT b. CLR c. RCT d. RC	b.
17)	Find the term: The .NET framework which provides automatic memory management using a technique called _____ ? a) Serialization b) Garbage Collection c) Assemblies d) Overriding	b.

18)	Which of the following denote ways to manage state in an ASP.Net Application? a. Session objects b. Application objects c. ViewState d. All the Above	d.
19)	What is the base class from which all Web forms inherit? a. Master Page b. Page Class c. Session Class d. None of the Above	b.
20)	ASP.NET was developed by a. IBM b. Google c. Microsoft d. None of the above	c.
21)	Which of the following method used for transfer one page to another page? a. Response.Transfer b. Response.Redirect c.Both a and b d.None of the Above	b.

22)	The type of code found in Code-Behind class is _____ ? a. Server-side code b. Client-side code c. Both A. and B. d. None of the above	a.
23)	To add a custom control to a Web form we have to register with. a. TagPrefix b. Name space of the dll that is referenced c. Assemblyname d. All of the above	b.
24)	Which of the following Session Mode Serialization is not required to store the data? a. InProc b. SQLServer c. StateServer d. None of the above	a.
25)	Syntax for closing and opening the connection in ADO.net is _____ a) sqlConn.Open() and sqlConn.close() b) sqlConn.open() and sqlConn.Close() c) sqlConn.Open() and sqlConn.Close() d) none of the mentioned	c.
26)	_____object is used to fill a DataSet/DataTable with query results in ADO.net. a) DataReader b) Dataset c) DataAdapter d) DataTables	c.

27)	Which of these data source controls do not implement Caching? a. LinqDataSource b. ObjectDataSource c. SqlDataSource d. XmlDataSource	a.
28)	How to implement authentication via web.config? a. Include the authentication element. b. Include the authorization element. c. Include the identity element. d. Include the deny element.	b.
29)	In a SQL Statement while working with SqlCommand it returns a single value, at that time ..... method of Command Object will be used. a. ExecuteScalar b. ExecuteReader c. ExecuteNonQuery d. None of the above	a.
30)	Which one of the following namespaces contains the definition for IdbConnection? a. System.Data.Interfaces b. System.Data.Common c. System.Data d. System.Data.Connection	d.

31)	Which one of the following namespaces contains the definition for IdbConnection? a. System.Data.Interfaces b. System.Data.Common c. System.Data d. System.Data.Connection	d.
32)	Select the control which does not have any visible interface. a. Datalist b. DropdownList c. Repeater d. Datagrid	c.
33)	What are characteristics best define .NET Core? a. Flexible deployment b. Cross-platform c. Command-line tools d. All of the above	d.
34)	What's the difference between Response.Write() andResponse.Output.Write()? a. Response.Output.Write() allows you to flush output b. Response.Output.Write() allows you to buffer output c. Response.Output.Write() allows you to write formatted output d. Response.Output.Write() allows you to stream output	b.

35)	Which file contains settings for all .NET application types, such as Windows, Console, ClassLibrary, and Web applications? a. Web.config b. Machine.config c. Global.asax d. All of the above	b.
36)	Which method do you invoke on the Data Adapter control to load your generated dataset? a. Fill( ) b. ExecuteQuery( ) c. Read( ) d. None	a.
37)	To implement a specified .NET Framework interface which directive is used? a. @Register b. @Control c. @Reference d. @Implements	d.
38)	Which of the following languages can be used to write server side scripting in ASP.NET? a. C-sharp b. VB c. C++ d. A and B	d.

39)	Which of the following can be used to add alternating color scheme in a Repeater control? a. AlternatingItemTemplate b. DataSource c. ColorValidator d. None of the Above	a.
40)	Suppose one wants to modify a SOAP message in a SOAP extension then how this can be achieved. Choose the correct option from below: a. One must override the method ReceiveMessage b. One must override the method InitializeMethod c. Both A. and B. d. One must override the method ProcessMessage	a.
41)	How many classes can a single .NET DLL contain? a. One b. Two c. None d. Many	d.
42)	What are the three primary kinds of parameters? a. Input, Integer, String b. Integer, String, DateTime c. int, varchar, nvarchar d. Input, Output, InputOutput	d.

43)	Which of the following allow writing formatted output? a. Response.Write() b. Response.Output.Write() c. Both A. and B. d. None of the Above	b.
44)	What property contains the actual error message returned by SQL Server? 1. SqlException.Source 2. SqlException.Message 3. SqlError.Class 4. SqlError.Message a. 1, 2 b. 1, 2, 3 c. 1, 3 d. 2, 4	d.
45)	In ASP.NET the < authorization > section contain which of the following elements? a. < deny > b. < allow > c. Both A. and B. d. None of the Above	c.

46)	In .NET the operation of reading metadata and using its contents is known as _____? a. Reflection b. Enumeration c. Binding d. Serialization	a.
47)	Which CommandType value is incorrect? a. StoredProcedure b. TableDirect c. TableSchema d. Text	c.
48)	If one has two different web form controls in a application and if one wanted to know whether the values in the above two different web form control match what control must be used? a. DataList b. GridView c. CompareValidator d. Listview	c.
49)	What attributes do you use to hide a public .Net class from COM? a. DLLImport Attributes b. ComVisible attributes c. COM Interop d. All	b.

50)	What datatype is returned when calling the ExecuteScalar method of a command object? a. System.Int32 b. Object c. No. of effected records d. None of the above	b.
51)	Which of the following constitutes the .NET Framework? ASP.NET Applications CLR Framework Class Library WinForm Applications Windows Services a. 1, 2 b. 2, 3 c. 3, 4 d. 2, 5	b.
52)	What are the advantages of AJAX a. AJAX is a platform-independent technology. b. It provides partial-page updates. c. Improved performance. d. All of the above.	d.

53)	Which control is required of every AJAX page to manage the JavaScript files sent to the client and the communication between client and server? a. UpdatePanel b. ScriptManager c. AsyncPostBackTrigger d. None of the above.	b.
54)	Which control can be used to update only the portion of the page? a. UpdatePanel b. ScriptManager c. AsyncPostBackTrigger d. None of the above.	a.
55)	Which protocol is used to transfer files frtom localhost to remote host? a. HTTP b. FTP c. TCP d. UDP	b.
56)	Which of the following directive is used to link an assembly to a page or user control? a. @Page b. @Import c. @Assembly d. @Reference	c.
57)	If you want that command object should returns XML data then which method of Command Object will be used? a. getXMLData b. getXML c. ExecuteXMLReader d. None of the above.	c.

58)	The method applied to change the styles of the elements in a ASP.NET webpage is called a. master page b. child page c. cascading style sheets d. UTF-8	c.
59)	Which of the following web server control display static text that can change at runtime? a. Hyperlink b. Textbox c. Label d. None of these above	c.
60)	Which web server control is used to display advertisements in ASP.NET a webpage? a. Image b. Imagemap c. Panel d. AdRotator	d.
61)	Which of the following server control shows data in a tabular format and allows sorting, paging, edit, delete each record? a. ListBox b. GridView c. Repeater d. None of these above	b.
62)	Which of the following webserver control used as container for other server controls in a ASP.NET webpage? a. PlaceHolder b. Panel c. Table d. ImageMap	b.

63)	By using which of the following web server control data can be retrieved from a relational database? a. ObjectDataSource b. SqlDataSource c. AccessDataSource d. XmlDataSource	b.
64)	Choose the correct option about DataSet object. a. Provides Disconnected mode b. Can store multiple table simultaneously c. Consumer Object d. All of the above.	d.
65)	AccessDataSource Control work with which of the following file types? a. .mpd file b. .mdb file c. .mdf file d. .myd file	c.
66)	Which of the following validation control is used to ensure that an user does not skip a form entity field? a. RequiredFieldValidator b. CompareValidator c. RangeValidator d. RegularExpressionValidator	a.
67)	Which type of validation is used to check an email address entered by the user is matches to email pattern? a. RangeValidator b. CustomValidator c. ValidationSummary d. RegularExpressionValidator	d.

68)	Using CustomValidator server control a. a developer can compell users to fill all the required fields b. a developer can sreate pop up menu c. a developer can write custom validation function as needed d. none of these above	c.
69)	The @Implements directive a. imports a namespace into current page page or user control b. assigns a class or virtual path used to type the Master property of a page c. indicates that a page or user control implements a specified .NET Framework interface d. none of these above	c.
70)	Which commands are used to specify settings of an .aspx file? a. Class b. Directives c. Events d. Validation	b.s
71)	Choose the correct option about Master Page and Theme. a. A Master Page enables you to share content across multiple pages in a website and A Theme enables you to control the appearance of the content. b. Theme enables you to share content across multiple pages in a website and A Master Page enables you to control the appearance of the content. c. App_Themes folder contains skin files. d. Option A and C are correct.	d.
72)	What is/are true about master page? a. Master page contains a <%@ Master %> directive instead of the normal <%@ Page %> directive. b. ContentPlaceHolder control can be added only on master page. c. You can add as many ContentPlaceHolders to a Master Page as you need. d. All of the above.	d.

73)	At which level Theme can be applied? a. Page level b. Site level (through the Web.config file) c. Individual control level d. All of the above.	d.
74)	Which control is required inside a content page to reference ContentPlaceHolder control inside the master page? a. Content control on a content page. b. ContentPlaceHolder on a content page. c. PlaceHolder control is required on content page. d. None of the above.	a.
75)	What is/are the advantages of master page? a. It helps to display common content in multiple pages. b. They allow you to centralize the common functionality of your pages so that you can make updates in just one place. c. It helps to create a common page layout. d. All of the above.	d.
76)	Choose the correct option about DataSet object. a. Provides Disconnected mode b. Can store multiple table simultaneously c. Consumer Object d. All of the above.	d.
77)	What types of data can you store in the Cache collection? a. Only String Type of Data b. You can store any type of data in the Cache collection. c. Only DataSet Object d. All of the above.	b.
78)	When do LINQ queries actually run? a. When they are iterated over in a foreachloop b. When calling the ToArray() method on the range variable c. When calling the ToList() method on the range variable d. All of the above	d.

79)	How many types of Cache Dependencies are available in ASP.NET? a. File based dependencies b. Key-based dependencies c. Time-based dependencies d. All of the above	d.
80)	Which of these data source controls do not implement Caching? a. LinqDataSource b. ObjectDataSource c. SqlDataSource d. XmlDataSource	a.
81)	If you want to access a web service method, which attribute it must have? a. [WebMethod] b. [PageMetod] c. [Web.Service] d. [WebSupport]	a.
82)	What is the file extension of web service in ASP.NET? a. .ascx b. .aspx c. .asmx d. .docx	c.
83)	In ASP.NET application DLL files are stored in which folder? a. App_Code b. App_Data c. Bin d. App_LocalResources	c.
84)	Application_Start event is available in which file? a. Global.asax b. Local.asax c. Web.config d. None of the above	a.

85)	In which Event you can set the value of a Theme? a. Page_Load b. Page_Render c. Page_PreRender d. Page_PreInit	d.
86)	If you are using Webparts in your web page then which control is necessary? a. WebpartController b. WebPartmanager c. WebpartZone d. None of the above	b.
87)	_____ is the DataType return in IsPostback property. a. bit b. boolean c. int d. object	b.
88)	What is the last event of web page life cycle? a. Page_Unload b. Page_Load c. Page_LoadComplete d. Page_Finish	a.
89)	If you must use a user name and password to connect to a database, where should you store the sensitive information? a. Compiled in the application b. In an encrypted application configuration file c. In a resource file deployed with the application d. In the registry	b
90)	Which of the following is the default authentication mode for IIS? a. Anonymous b. Windows c. Basic Authentication d. None	a.

91)	If any user has disabled cookies in their browsers, what can you do to enable them to use forms authentication?
	
	a. Set BoweserCookieEnabled=true;
	b. Set cookieless=true;
	c. Use the AutoDetect setting of the cookieless attribute.
	d. None of the above.
		c.

92)	Which of the following works on server side? a. ViewState b. HiddenField c. Application and session d. All of the above	c.
93)	What happen in the Web Page when Init event occur? a. ViewState is loaded on the page. b. Each child control of the page is initialized to its design time values. c. HTML is rendered. d. None of the above	b.
94)	What are the types of Web Server Button Controls that can be created? a. Only Submit buttons b. Only Command buttons c. Submit and command buttons d. None of the above.	c.
95)	What is the name of the Page object's property that determines if a Web page is being requested without data being submitted to server? a. IsCallback b. IsReusable c. IsValid d. IsPostBack	d.

96)	_____ is the DataType return in IsPostback property. a. bit b. boolean c. int d. object	b.
97)	If you are using user control in ASP.NET page which directory will be used? a. Register b. Assembly c. Implements d. Aspx	a.
98)	Debug class is available in which namespace? a. System.Debug b. System.Data c. System.Diagnostics d. None of the above	c.
99)	How do you execute multiple SQL statements using a DataReader? a. Call the ExecuteReadermethod of two Command objects and assign the results tothe same instance of a DataReader. b. Call the ExecuteReadermethod of a single Command object twice. c. Set the Command.CommandTextproperty to multiple SQL statements delimited by a semicolon. d. Set the Command.CommandTypeproperty to multiple result sets.	c.
100)	Which SqlCommand execution returns the number of effected records in the table? a. ExecuteNonQuery b. ExecuteReader c. ExecuteXmlReader d. ExecuteScalar	a.

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	Question Bank of CA-8.3 Network Programming (254803)	ANS
1)	**What is Concurrent server?** a. Handle one request at a time b. Handle multiple request at a time c. Not handle any request d. None of the above	b
2)	**Abbreviate SMTP** a. Simple Mail Transport Protocol b. Single Mail Transfer Protocol c. Simple Mail Transfer Protocol d. Single Mail Transport Protocol	c
3)	In specific, if the systems use separate protocols, which one of the following devices is used to link two systems? a. Repeater b. Gateway c. Bridge d. Hub	b
4)	**Which of the following system call is used for opening a file?** a) read b) write c) open d) close	c
5)	**Which of the following is/are the components of sendmail?** A. Mail user agent(MUA) B. Mail transfer agent(MTA) C. Mail delivery agent(MDA) D. All of the above	d
6)	**What is User Agents in SMTP** a. It acts as a Mail Box b. It prepares the message, encloses it in an envelope c. It transfers the mail across the internet d. It sends and receives the message	b
7)	**Find the following call never returns an error?** a) open b) fork c) ioctl d) getpid	d
8)	**For reading input, which of the following system call is used?** a) write b) rd c) read d) change	c
9)	**Which of the following are not system calls?** a. close b. getc c. bind d. connect	b

10)	**Which of the following mode is used for opening a file in both reading and writing?** a) O_RDONLY b) O_WRONLY c) O_RDWR d) O_WDR	c
11)	**Open system call returns the file descriptor as ___** a) int b) float c) double d) char	d
12)	**IPv6 has _____ -bit** a. 32 b.64 c.128 d. variable	c
13)	**DHCP is the abbreviation of** a. Dynamic Host Configuration Protocol b. Dynamic Host Control Protocol c. Dynamic Hyper Control Protocol d. Dynamic Hyper Configuration Protocol	a
14)	**..... is limited to 7-bit ASCII text, with a maximum line length of 1000 characters.** A. SMTP B. MIME C. POP D. MTA	a
15)	**Can a multi-user chat application be developed using UDP protocol?** a. Yes b. No	a
16)	**Which of the following class does not provide getInputStream() method?** a. Socket b.DatagramSocket c. URLConnection d. None of the above	b
17)	**Which of the following object is required at both ends for TCP/IP based communication?** a. InetAddress b. ServerSocket c. DatagramSocket d. Socket	d
18)	**How many versions available of IP?** a. 6 version b. 4 version c. 2 version d. 1 version	c

19)	**Which is the type of socket?** a. Datagram b. Stream c. Raw d. All the above	d
20)	**Who provide us internet?** a. TCP b. HTTP c. ISP d. FTP	c
21)	DNS is an acronym for _____. (a) Domain Name Security (b) Domain Number System (c) Document Name System (d) Domain Name System	d
22)	**What is a Zone in DNS?** a. A set of distinct but non-contiguous portions of the domain name space managed by multiple administrators b. A distinct, contiguous portion of the domain name space managed by multiple administrators c. A set of distinct but non-contiguous portions of the domain name space managed by a single administrator d. A distinct, contiguous portion of the domain name space managed by a single administrator	d
23)	**The applications of the Client and Server Model are** a.World Wide Web b.Network Printing c.Email d.All of the above	d
24)	**In a_____name space, each name is made of several parts.** a. Flat b. Organized c. Hierarchical d. None of the above	c
25)	**A_____is a subtree of domain name space.** a. Label b. Domain c. Name d. None of the above	b
26)	**_____is a technology that creates and handle dynamic document.** a. CGI b. GIC c. HTPP d. WWW	a

27)	**TCP process may not write and read data at the same speed. So we need _____ for storage.** a) Packets b) Buffers c) Segments d) Stacks	b
28)	**To achieve reliable transport in TCP, _____ is used to check the safe and sound arrival of data.** a) Packet b) Buffer c) Segment d) Acknowledgment	d
29)	**What is the size of MAC Address?** a. 16-bits b. 32-bits C. 48-bits d. 64-bits	c
30)	**…….. is responsible for converting the higher level protocol addresses (IP addresses) to physical network addresses.** a) Address Resolution Protocol (ARP) b) Reverse Address Resolution Protocol (RARP) c) Bootstrap Protocol (BOOTP) d) Internet Control Message Protocol (ICMP)	a
31)	**If exec is called immediately after forking,** a) The program specified in the parameter to exec will replace the entire process b All the threads will be duplicated c) All the threads may be duplicated d) None of the mentioned	a
32)	**Which of the following services use TCP?** **DHCP** **SMTP** **HTTP** **TFTP** **FTP** a. 1 and 2 b. 2, 3 and 5 c. 1, 2 and 4 d. 1, 3 and 4	b

33)	**You want to implement a mechanism that automates the IP configuration, including IP address, subnet mask, default gateway, and DNS information. Which protocol will you use to accomplish this?** a. SMTP b. SNMP c. ARP d. DHCP	d
34)	**Which of the following is private IP address?** a. 12.0.0.1 b. 168.172.19.39 c. 172.15.14.36 d. 192.168.24.43	d
35)	**Which of the following allows a router to respond to an ARP request that is intended for a remote host?** a. Gateway DP b. Reverse ARP (RARP) c. Proxy ARP d. Inverse ARP (IARP)	c
36)	**Which class of IP address provides a maximum of only 254 host addresses per network ID?** a. Class A b. Class C c. Class B d. Class D	b
37)	**What is the address range of a Class B network address in binary?** A. 01xxxxxx B. 0xxxxxxx C. 10xxxxxx D. 110xxxxx	c
38)	**Return value of the UDP port "Chargen" is _____** a) String of characters b) String of integers c) Array of characters with integers d) Array of zero's and one's	a
39)	**Which of the following is not a mechanism that DHCP supports for IP address allocation?** a) Automatic allocation b) Static allocation c) Dynamic allocation d) Manual allocation	b
40)	**The name of the protocol which provides virtual terminal in TCP/IP model is.** a) FTP b) SMTP c) HTTP d) Telnet	d

41)	**In a/an ..... of DNS resolver, the queried name server can return the best answer i currently has back to the DNS resolver.** a. Recursive queries b. Iterative queries c. Reverse queries d. Inverse queries	b
42)	**Central Computer which is powerful than other computers in the network is called as _____.** a.Client b.Server c.Hub d.Switch	b
43)	**Machine that places the request to access the data is generally called as _____.** a. Server Machine b. Client Machine c. Request Machine d. None of the above	b
44)	**File transfer protocol (FTP) is built on _____architecture** a.Peer to peer b.Client server c.Both a and b d.None of the above	b
45)	**The first line of HTTP request message is called ____.** a.Request line b.Header line c.Status line d.Entery line	a
46)	**The main reason for transition from IPv4 to IPv6 is _____** a) Huge number of systems on the internet b) Very low number of system on the internet c) Providing standard address d) To provide faster internet	a
47)	**RPC is a _____** a) asynchronous operation b) synchronous operation c) time independent operation d) channel specific operation	b
48)	**Which of the following protocols is used for WWW ?** A. ftp B. http C. w3 D. all of the above	b
49)	**RPC (remote procedure call) is used to** a.Establish a server on remote machine that can respond to queries b.Retrieve information by calling a query c.Both a and b d.None of the above	c
50)	**The WWW today is a _____ client-server service, in which a client using a browser can access a service using a server.** a.Limited b.Vast c.Distributed d.None of the above	c

51)	**In remote procedure call, the client program must be bound with a small library procedure called .....** a.Server stub b.Marshalling c.Client hub d.Client stub	d
52)	**Which of the following is an example of a client-server model?** a.FTP b.DNS c.TELNET d.All of the above	d
53)	**Which 2 protocols are used in the Transport layer of the TCP/IP model?** a) UDP and HTTP b) TCP and UDP c) HTTP and TCP d) ICMP and HTTP	b
54)	**Which of the protocol is not used in the network layer of the TCP/IP model?** a) ICMP b) IP c) IGMP d) HTTP	d
55)	**Which of the following allows a router to respond to an ARP request that is intended for a remote host?** a.Gateway DP b. ReverseARP (RARP) b.Proxy ARP d.Inverse ARP (IARP)	c
56)	**Which class of IP address provides a maximum of only 254 host addresses per network ID?** a. Class A b. Class B c. Class C d. Class D	c
57)	**If you use either Telnet or FTP, which is the highest layer you are using to transmit data?** a. Transport b.Presentation c.Session d. Application	d
58)	**Which of the following protocols uses both TCP and UDP?** a.FTP b.SMTP c.Telnet d.DNS	d
59)	**What layer in the TCP/IP stack is equivalent to the Transport layer of the OSI model?** a) Application b) Host to host c) Internet d) Network Access	b
60)	**Which of the following is not the layer of TCP/IP protocol?** a. Physical layer b. link layer c. network layer d. transport layer.	b
61)	**To use the services of UDP, we need …… socket addresses.** a. four b. two c. three d. four	b
62)	**……. is responsible for converting the higher-level protocol address (IP addresses) to physical network addresses.** a. Internet Protocol(IP) b. Internet Control Message Protocol(ICMP) c. Address Resolution Protocol(ARP) d. Bootstrap Protocol(BOOTP)	c

63)	**Remote Procedure Calls are used _____** a) for communication between two processes remotely different from each other on the same system b) for communication between two processes on the same system c) for communication between two processes on separate systems d) none of the mentioned	c
64)	**To differentiate the many network services a system supports _____ are used.** a) Variables b) Sockets c) Ports d) Service names	c
65)	**What is stub?** a) transmits the message to the server where the server side stub receives the message and invokes procedure on the server side b) packs the parameters into a form transmittable over the network c) locates the port on the server d) all of the mentioned	d
66)	**A remote procedure call is _____** a) inter-process communication b) a single process c) a single thread d) a single stream	a
67)	**Which of these packages contains classes and interfaces for networking?** a) java.io b) java.util c) java.net d) java.network	c
68)	**NFS is……..** a) Filesystems b) Operating systems c) Transport protocols d) File access protocols	d
69)	**NFS stands for….** a) Null File System b) New File System c) Network File System d) Netware File Server	c
70)	**A _____ directory is mounted over a directory of a _____ file system.** a) local, remote b) remote, local c) local, local d) none of the mentioned	d
71)	**The _____ becomes the name of the root of the newly mounted directory.** a) root of the previous directory b) local directory c) remote directory itself d) none of the mentioned	b
72)	**Application layer sends & receives data for particular applications using Hyper Text Transfer Protocol (HTTP), and Simple Mail Transfer Protocol (SMTP).** a) True b) False	a

73)	Which class is given wrong here ? a. CLASS A = 1 to 126 b. CLASS B = 128 to 191 c. CLASS C = 192 to 220 d. CLASS D = 224 to 239 (Multicasting)	c
74)	**What type of addresses does DHCP server use?** a. Permanent address b. Local address c. Pool address d. Both a and c	d
75)	**_____ allows you to connect and login to a remote computer** a) Telnet b) FTP c) HTTP d) SMTP	a
76)	**All telnet operations are sent as _____** a) 4 bits b) 8 bits c) 16 bits d) 32 bits	b
77)	**Which of the following is true for character mode operation of telnet implementation?** a) each character typed is sent by the client to the server b) each character typed is discarded by the server c) each character typed is aggregated into a word and then sent to the server d) each character type is aggregated into a line and then sent to the server	a
78)	**The main reason for transition from IPv4 to IPv6 is _____** a) Huge number of systems on the internet b) Very low number of system on the internet c) Providing standard address d) To provide faster internet	a
79)	**A DNS client is called _____** a) DNS updater b) DNS resolver c) DNS handler d) none of the mentioned	b
80)	**What is the difference between TCP and UDP?** a. TCP guarantees that a packet will reach the destination without any duplication while UDP does not provide this guarantee. b. The order of data will be same in TCP but that won't be so in UDP. c. TCP is unreliable protocol but UDP is a reliable protocol. d. Only a and b	D
81)	**What is internet?** A. a single network B. a vast collection of different networks C. interconnection of local area networks D. none of the mentioned	b
82)	**What does the java.net.InetAddress class represent?** a) Socket b) IP Address c) Protocol d) MAC Address	b

83)	**Which is true for TCP connections?** A. TCP connection is a message stream, but it does not preserve message boundaries B. TCP connection is byte stream and it preserves message boundaries C. TCP connection is byte stream and it does not preserve message boundaries D. TCP connection is message stream which preserves message boundaries	c
84)	**Virtual terminal protocol is an example of _____** a) Network layer b) Application layer c) Transport layer d) Physical layer	b
85)	**Which system call returns the process identifier of a terminated child?** a. close b. exit c. wait d. get	c

86)	**The following program results in the creation of?**
	main()
	{
	if(fork()>0)
	sleep(100);
	}
	
	a) an orphan process b) a zombie process
	c) a process that executes forever d) none of the mentioned
		b

87)	**The header length of an IPv6 datagram is _____** a) 10bytes b) 25bytes c) 30bytes d) 40bytes	d
88)	The location of a resource on the internet is given by its? a. Protocol b. URL c. E-mail address d. ICQ	b
89)	**How many types of Socket present in Computer network programming?** a. 5 b. 6 c. 3 d. None of the above	c

90)	**_____ Protocol defines how messages are formatted and transmitted, and what actions Web servers and browsers should take in response to various commands.** (a) FTP (b) TCP/IP (c) HTTP (d) SMTP	c
91)	**What is User Agents in SMTP** a. It acts as a Mail Box b. It prepares the message, encloses it in an envelope c. It transfers the mail across the internet d. It sends and receives the message	b
92)	**The term IPv4 stands for?** a. Internet Protocol Version 4 b. Internet Programming Version 4 c. International Programming Version 4 d. None of these	a
93)	**An RPC (remote procedure call) is initiated by the** a.Server b. Both (a) and (b) c.Client d.None of the mentioned	c
94)	**Which software prevents the external access to a system?** a. Firewall b. Gateway c. Router d. Virus checker	a
95)	**An RPC application requires** a.Specific protocol for client server communication b.A client program c.A server program d.All of the above	d
96)	**The number of layers in ISO OSI reference model is _____** a. 5 b. 7 c. 6 d. 10	b
97)	**The length of an IPv6 address is?** a. 32 bits b. 64 bits c. 128 bits d. 256 bits	d
98)	**What is the default port of SMTP?** a. 85 b. 70 c. 25 d. 50	c

99)	When the mail server sends mail to other mail servers it becomes ___ ? a. SMTP client b. SMTP server c. Peer d. Master	a
100)	**In a ……, the kernel can execute on any processor, and typically each processor does self-scheduling from the pool of available processes or threads.** a) master/slave b) symmetric multiprocessor c) cluster d) SIMD	a

	Question Bank of CA 8 .4 Advanced Computer Graphics(254804)	ANS
1)	Which of the following is the Computer Graphics application- a. Statistical Representation b. Image Formation c. Information Retrieval d. Computation Physics	d
2)	Hardwar pipeline consists of _____phase. a. Circuits b. Ports c. Computations d. Discs	c
3)	Which of the following is computational Phase- a. Rasterization b. Vectorization c. Segmentation d. Transition	a
4)	The quality of Image depends on – a. No. of Pixels used by image b. No. of lines used by image c. No. of resolution used by image d. None of these	a
5)	Types of Computer Graphics are- a. Scalar and raster b. Vector and raster c. Vector and scalar d. None of these	b
6)	Components of iterative computer graphics are a. A light pen b. Display unit c. Bank of switches d. All of the above	d
7)	Computer Graphics models are commonly used for making- a. Television show b. Motion Pictures c. Music Videos d. All of the above	d

8)	Graphics programs are those which creates- a. Images b. Pictures c. Designs d. All of the above	b
9)	The process of determining the appropriate pixels for representing picture or graphics object is known as a. animation b. Rasterization c. Both a & b d. representation	b
10)	A World- coordinate area selected for display is called is a. Graphics b. Window c. GUI d. None of the above	b
11)	Solid pattern in random scan display is _____ to fill a. Easy b. Difficult c. Not fill d. None of the above	b
12)	In beam penetration method of color CRT, two layer phosphor coated are- a. Red and blue b. Red and green c. Blue and green d. None of the above	a
13)	LCD is an _____ a. Emissive b. Non Emissive c. Expensive d. None	b
14)	A technique by which the vertical and/or horizontal scan frequency of video signal can be changed for Different purpose and application is called a. scan conversion b. Polygon filling c. Two dimensional graphics d. Antialiasing	a
15)	DSVT stands for a. Digital View Storing Table b. Digital Visual Storage Tube c. Direct View Storage Tube d. Digital View Storage Tube	c

16)	Sequencing and display of a set of images to create a visual change effect is called a. Computer animation b. Computer graphics c. Computer Videography d. Computer image terminals	a
17)	Which of the following are Computer graphics coordinates systems – a. Two Dimensional Co-ordinates System b. Three Dimensional Co-ordinates System c. Both a and b d. None of the above	c
18)	Each image used in sequence by video is said to be a. Entity b. Instance c. Frame d. Block	c
19)	Line consists of how many number of coordinates a. 2 b. 3 c. 4 d. None	c
20)	Which is reflection about origin a. x' = x , y' = -y b. x' = -x , y' = -y c. x' = x , y' = y d. x' = -x , y' = y	b
21)	"The boundary is specified in a single color, and the algorithm proceeds pixel by pixel until the boundary color is encountered "- These statement defines which of the following algorithm a. Scan-fill algorithm b. Boundary-fill algorithm c. Entire fill algorithm d. Slide curve algorithm	b
22)	The Process of colouring the area of polygon is called a. Polygon flow b. Polygon filling c. Aliasing d. None of these	b

23)	Moving, Resizing ,changing direction of an object refer as a. Translation b. Rotation c. Scaling d. Transformation	d
24)	Consider point (x,y), moving the point to(x',y') by adding some value dx,dy is called a. Translation b. Rotation c. Scaling d. None	a
25)	Consider point (x,y),rotating point about origin by angle theta is called as a. Translation b. Rotation c. Scaling d. None	b
26)	Which is reflection about x-axis a. x' = x , y' = -y b. x' = -x , y' = -y c. x' = x , y' = y d. x' = -x , y' = y	b
27)	which equation is correct about Scaling a. X' = Sx * X , Y' = Sy * Y b. X' = Sx * Y, Y' = Sy * Y c. X' = Sx * X , Y' = Sy * X d. X' = Sx * X, Y' = Sx * Y	a
28)	An ellipse can also be rotated about its centre coordinates by rotating a. End points b. Major and minor axes c. Only A d. None	b
29)	Which is reflection about y-axis a. x' = x , y' = -y b. x' = -x , y' = -y c. x' = x , y' = y d. x' = -x , y' = y	d

30)	which of the following is/are line clipping algorithm a. Cohen sutherland algorithm b. Cyrus-beck algorithm c. Both a & b d. None of these	c
31)	Cohen Sutherland algorithm is _____ algorithm a. Polygon clipping b. Line clipping c. Point clipping d. None of these	b
32)	Cyrus –Back algorithms is _____ algorithm a. Polygon clipping b. Point clipping c. Line clipping d. None of these	c
33)	A line with endpoints codes as 0000 and 0100 is ? a. Partially invisible b. Completely visible c. Completely invisible d. Trivially invisible	a
34)	Some common clipping includes a. Curve clipping b. Polygon clipping c. Point clipping d. All of the above	d
35)	The process of mapping a world window in world coordinates system to viewport are called a. Trasformation Viewing b. Viewport c. Clipping window d. Screen coordinates system	a
36)	Which approaches are used for determine whether a particular point is inside or outside of polygon a. Even odd method b. Winding number method c. Both a &b d. None of these	c

37)	The selection and separation of a part of text or image for further operation are called as a. Translation b. shear c. Rotation d. Clipping	d
38)	All the hidden surface algorithms employees image space approach except a. Depth sort method b. Scan line method c. Depth buffer method d. Back face removal	d
39)	The first viewing parameter we Must consider is the? a. view reference plane b. view reference point c. viewing window d. Shifting vector	b
40)	Region code of point within the window is a. 0000 b. 0001 c. 1000 d. 1111	a
41)	The _____ algorithms divide 2D space into 9 regions of which only the middle parts(viewport) is visible. a. Cohen Sutherland algorithm b. liangBarsky c. SutherlangHodgman d. None of these	a
42)	A Bezier curve is a polynomial of degree _____the no of control points used a. One more than b. One less than c. Two less than d. None of these	b
43)	Bezier spline always passes through a. First and second control point b. Does not pass from First and second control point c. Both a & b d. None of these	a

44)	The Bezier curve obtained from the four control points is called a a. Square Bezier curve b. Cubic Bezier curve c. Hectare Bezier curve d. Rectangle Bezier curve	b
45)	The orthographic projection that show more than one side of an object are called a. Axonometric projection b. Isometric projection c. Both a & b d. None of these	b
46)	The projection that can be viewed as the projection that has a centre of projection at a finite distance from the plane of projection are called a. Parallel projection b. Perspective projection c. Isometric projection d. None of these	b
47)	The shape of a Bezier curve primarily depends upon the a. Position of control points b. Distance of control points c. Position of control panel d. None of these	a
48)	The no of control points in a Bezier curve ensures the a. Jaggies of curve b. Smoothness of curve c. Straightness of curve d. None of these	b
49)	What is Shearing is also termed as a. Skewing b. Translating c. Moving d. None of the above	a
50)	The method which is based on the principle of checking the visibility point at each pixel position on the projection plane are called a. Object-space methods b. Image-space methods c. Both a & b d. None of these	b

51)	Which surface algorithm is based on perspective depth ? a. Depth comparison b. Z-buffer or depth-buffer algorithm c. subdivision method d. back-face removal	b
52)	A fast and simple method for rendering an object with polygon surface is a. Constant-intensity shading b. Flat shading c. Both a & b d. None of these	c
53)	Which one is not the neighbour of a pixel (x,y) in 4 -connected method ? a. (x,y+1) b. (x+1,y+1) c. (x,y-1) d. none of these	d
54)	Various curve functions are useful in _____. a. Object modeling b. Graphics applications c. Animation path specifications d. All of the given	a
55)	The best hidden surface removal algorithm is ? a. Depth buffer b. Area subdivision c. Depends on the application d. painters	c
56)	Engineering drawing commonly applies ? a. orthographic projection b. oblique projection c. perspective projection d. none of the above	a
57)	Back face removal is an example of ? a. combination of both b. image space method c. object space method d. none of the above	c
58)	Oblique projection with an angle of 45 degree to the horizontal plane is called as a. Cabinet projection b. Cavalier projection c. Isometric projection d. None of these	b

59)	A transformation that slants the shape of objects is called the_____ a. reflection b. shear transformation c. translation d. none of these	b
60)	The region code of a point is 1001. The point is in the .....region of window. a. Top right b. Top left c. Bottom left d. Bottom right	b
61)	The equation for describing surface of 3D plane are a. Ax+ By+ Cz+ D= 0 b. Ax+ By+ Cz = 0 c. Ax+ By+ D= 0 d. Ax+ By+ Cz+ D= 1	a
62)	The Bezier curve obtained from the four control points is called a a. Square Bezier curve b. Cubic Bezier curve c. Hectare Bezier curve d. Rectangle Bezier curve	b
63)	The shape of a Bezier curve primarily depends upon the a. Position of control points b. Distance of control points c. Position of control panel d. None of these	a
64)	More the control points of a Bezier curve,_____ quality of the curve a. Higher b. Lower c. Bad d. None of these	a
65)	_____is a flexible strip that is used to produce smooth curve using a set of point a. Spline b. Scan-line method c. Depth-sorting method d. None of these	a
66)	The equation for describing surface of 3D plane are a. Ax+ By+ Cz+ D= 0 b. Ax+ By+ Cz = 0 c. Ax+ By+ D= 0 d. Ax+ By+ Cz+ D= 1	a

67)	The array are used with scan line coherence algorithm are a. For intensity value b. For depth value c. Both a & b d. None of these	c
68)	The painter algorithm were developed on a. 1972 by Newell b. 1972 by Evans c. 1974 by Cat mull d. None of these	a
69)	The painter algorithm are also called a. Depth sort algorithm b. Priority algorithm c. Both a & b d. None of these	c
70)	The painter algorithm are based on the property of a. Polygon b. Frame buffer c. Depth buffer d. None of these	b
71)	What is x-shear? a. x'=x+ shx. y , y'=y b. x'=x+ shx. x , y'=y c. y'=x+ shx.y , x'=x d. y'=y+ shy. x , x'=x	d
72)	What is y-shear? a. x'=x+ shx. y , y'=y b. x'=x+ shx. x , y'=y c. y'=x+ shx. y , x'=x d. y'=y+ shy. x , x'=x	a
73)	How many steps required for composite transformation a. One b. Two c. Three d. None of the above	c
74)	The scan line coherence algorithm was developed by a. Wylie b. Evans c. Cat mull d. Both a & b	d

75)	What is true for an rotate an object about an arbitrary point? a. Rotate it about the origin , Translate point to the origin b. Translate point to the origin, Rotate it about the origin , translate the center of rotation back where it belonge c. Translate point to the origin, Scale it about the origin , translate the center of rotation back where it belonge d. None of the above	b
76)	A many sided figure is termed as a. Square b. Polygon c. Rectangle d. None	b
77)	Ray-tracing is an extension of a. Ray calling b. Ray casting c. Ray sampling d. Ray coherence	b
78)	Scan lines are used to scan from a. Top to bottom b. Bottom to top c. Both a & b d. None of these	a
79)	In displaying a clipped picture the efficient method is ? a. Clipping against the window and then applying the window transformation b. Applying window transformation and then clipping against the view port c. Both A and B have the same efficiency d. Efficiency depends on whether the window is an aligned rectangle or not	D
80)	The anti - aliasing technique which allows shift of 1/4,1/2 and 3/4 of a pixel diameter enabling a closer path of a line is ? a. Filtering b. Pixel phasing c. Sampling technique d. Intensity compensation	d
81)	The amount of light emitted by the phosphor coating depends on the? a. Number of electrons striking the screen b. Speed of electrons striking the screen c. Distance from the cathode to the screen d. None of above	a

82)	Lower persistence phosphorus is used in a. Animation b. Simple object c. Complex object d. All of these	a
83)	Higher persistence phosphorus needs _____ refresh rate a. Lower b. Higher c. Medium d. None of these	a
84)	Phosphorus are of various types depending on a. Color b. Persistence c. both a & b d. none of these	c
85)	The subtractive color model use the concept of a. Printing ink b. Light to display color c. Printing line d. None of these	a
86)	A fast and simple method for rendering an object with polygon surface is a. Constant-intensity shading b. Flat shading c. Both a & b d. None of these	c
87)	The basic parameter to curved attributes are? a. Width b. Color c. Type d. All of above	d
88)	Raster curves of various widths can be displayed using? a. Horizontal and vertical spans b. Vertical spans c. Horizontal spans d. Horizontal or vertical spans	d
89)	If the magnitude of the curve slope is lesser than 1, then? a. We can plot horizontal spans b. We can plot vertical spans c. Both A & B d. None of above	b

90)	If the slope magnitude is 1, then circles, ellipse and other curves will appear? a. Rough b. Big c. Thinnest d. Thick	c
91)	One of the method for displaying thick curves is? a. Curve cap b. Curve slope c. Curve width d. None of above	b
92)	The function of the pixel mask is? a. To display dashes and inter dash spaces according to the slope b. To display curved attributes c. To display the thick curves d. None of above	a
93)	The curves displayed with a rectangular pen will be? a. Thicker and magnitude slope is 1 b. Thicker and magnitude slope >1 c. Thinner d. None of above	a
94)	Choose the correct representation of Hyperbola? a.$\frac{x2}{a2}-\frac{y2}{b2}=1$ b.$\frac{y2}{a2}-\frac{x2}{b2}=1$ c. $\frac{a2}{x2}-\frac{b2}{y2}=1$ d. None of these	**a**
95)	_____is a flexible strip that is used to produce smooth curve using a set of point. a. Spline b. Scan-line Method c. Depth Sorting Method d. None of above	**a**
96)	The types of spline curve are a. Open spline b. Closed spline c. Both a & b d. None of these	**C**
97)	Which of following the light or reflection types a) Specular b) Diffuse c) Ambient d) All of the above	**d**

98)	Phong shading algorithm interpolates the Phong shading algorithm interpolates the normals and compute lighting during a) rasterization b) Vectorization c) Segmentation d) Transition	**a**
99)	Final illumination of a point (Vertex) a) Ambient b) Diffuse c) Specular d) None of these	**d**
100)	Gouraud Shading can be done using a) Goolge b) OpenGL c) Raster d) None of the above	**b**

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	Question Bank of CA-8.5 Optimization Algorithms(254805)	ANS
1.	Operations Research was known as an ability to win a war without really going in to a A. Battlefield B. Fighting C. War D. Both A andB	D
2.	Who defined Operations Research as an aid for the executive in marketing his decisions by providing him with the quantitative information based on the scientific method of analysis? A. C. Kitte B. H.M. Wagner C. E.L. Arnoff D. None of the above	A
3.	Which of the following is not required in LPP formulation? A. Write the hole problem B. Defining the decision variable C. Writing constraints D. Applying nonnegative constraints	A
4.	Which of the following use for LP to find optimal use of A. Money B. Manpower C. Machine D. All the above	D
5.	Operations Research helps in refining the _____ of the result but doesn't give a perfect solution. A. Clarity B. Quality C. Both A and B D. Decisions	B
6.	Identify the Phases and Processes of Operations Research Study i. Observe the problem ii. Analysis and defining the problem iii. Developing model iv. Collecting data v. Coming up with solution vi. Qualifying the model and solution vii. Implement the solution A. i , ii, iii, iv ,v ,vii B. i , ii, iii, iv ,vi ,vii C. i , ii, iii, iv ,v, vi ,vii D. i , ii, iv ,v ,vii	C

7.	Which of the following techniques or tools of Operations Research? A. Queuing Theory B. Inventory Control Models C. Network analysis D. All of the above	**D**
8.	Which of the following typical Applications/Scope of Operations Research A. Finance, Budgeting and Investments B. Purchasing, Procurement and Exploration C. Production Management D. All of the above	**D**
9.	Which of the following techniques or tools of Operations Research? A. Replacement Problems B. Sequencing C. Integer Programming D. All of the above	**D**
10.	Which of the following techniques or tools of Operations Research? A. Assignment Problems B. Transportation Problems C. Decision Theory and Games Theory. D. All of the above	**D**
11.	Which of the following techniques or tools of Operations Research? A. Dynamic Programming B. Simulation C. Symbolic Logic D. All of the above	**D**
12.	Which of the following techniques or tools of Operations Research? A. Symbolic Logic B. Goal-programming C. Markov Analysis D. All of the above	**D**
13.	Which are not advantages of Operations Research? A. Better Decision B. Better System C. Better Control D. None of the above	**D**
14.	Which is not Personnel Management operational research role? A. Selection of suitable personnel. B. Assignment of jobs. C. Skills balancing. D. All of the above	**D**

15.	Which is not Marketing operational research role? i. Product selection, timing, etc. ii. Advertising media, budget allocation. iii. Number of salesman required. iv. Selection of product mix. A. Only i B. Both i , ii C. All i, ii ,iii , iv D. None of the above	**C**
16.	Graphical methods contain how many special cases? A. One B. Two C. Three D. Four	**D**
17.	Who is father of operation research A. Philip M. Morse B. J.F. McCloskey C. F.N. Trefethen D. P.F. Adams	**A**
18.	Operations Research (OR) , is a used for A. Operations B. Research C. Decision – Making D. None of the above	**C**
19.	Operation research having how many principles? A. Four B. Five C. Seven D. None of the above	C
20.	In which year term Operations Research was invented A. 1940 B. 1950 C. 1978 D. 1960	A
21.	Maximum P: 20x + 35y Subject to: x + 2y >= 34 3x+ 4y >= 90 Where x ,y >=0 A. Multiple Optimal Solutions B. Infeasible Solution C. Unbounded Solution D. None of the above	**C**

22.	In simplex method , if constraint is of type less than equal to than we add _____ A. Slack Variable B. Surplus Variable C. Artificial Variable D. None of the above	**A**
23.	Each LPP is connected with another LPP is called ---------- A. Primal B. Dual C. Non-linear programming D. None of the above	**B**
24.	Operations Research approach is A. Multi-disciplinary B. Scientific C. Initiative D. All of the above	**B**
25.	Decision variables are A. Scientific B. Initiative C. Multi-disciplinary D. None of the above	**D**
26.	The quantitative approach to decision analysis is A. Logical approach B. Rational approach C. Scientific approach D. All of the above	**B**
27.	What is being considered as one of the most versatile management tools? A. Electronic Computers B. Linear Programming C. Computer Programming D. None of the above	**B**
28.	A maximized objective function having _____ function A. Profit B. Active C. Passive D. None of the above	**A**
29.	A LPP solved which kind of resource allocation problems? A. Production planning & scheduling B. Assignment Problem C. Game theory D. All of the above	**D**

30.	The following primal having how many dual constraints Maximum P: 12x + 13y Subject to: 5x + 2y <= 140 3x+ 6y <= 190 where x ,y >=0 A. Two B. Three C. Four D. None of the above	**A**
31.	The following primal having how many dual constraints Minimum P: 15x + 13y Subject to: 5x + 12y >= 60 30x + 60y >= 90 x + 2y <= 40 where x ,y >=0 A. Two B. Three C. Four D. None of the above	**A**
32.	Is every optimal solution is feasible solution? A. Yes B. No	**A**
33.	What is dual of any primal who's having objective function Minimize? A. Maximize B. Minimize C. Both A & B D. None of the above	**A**
34.	Maximum P: 2x + 3y Subject to: 6x + 2y <= 12 4x + 2y <= 16 Where x ,y >=0 A. Multiple Optimal Solutions B. Infeasible Solution C. Unbounded Solution D. Redundant Constraint	**D**
35.	LPP infeasible solution goes to A. First Quadrant B. First and Second Quadrant C. Second Quadrant D. None of the above	**D**
36.	Each feasible basic solution must satisfy A. Negativity Constraint B. Basic Constraint C. Non-negativity Constraint D. Common Constraint	

37.	The objective function Minimized C = 2x + y with respect to the feasible region at which point it gives minimum cost? A. (3,2) B. (5,0) C. (2,4) D. (0,7)	**D**
38.	The linear function in LPP having A. Decision variable B. Constraints C. Objective Function D. Nonnegative constraints	**C**
39.	Maximum P: 2x + 3y Subject to: 6x + 2y <= 12 4x + 2y >= 16 Where x ,y >=0 A. Multiple Optimal Solutions B. Infeasible Solution C. Unbounded Solution D. Redundant Constraint	**B**
40.	In simplex method key column is also called A. Pivot Column B. Plan Column C. Both A & B D. None of the above	**A**
41.	In simplex method key row is also called A. Plan row B. Pivot row C. Both A & B D. None of the above	**B**
42.	The objective function Maximized P = 3x + 4y with respect to the feasible region at which point it gives maximum Profit? A. (0,2) B. (3,0) C. (4,2) D. (2,4)	**D**
43.	Intersection of key row and key column is also called A. Pivot Element B. Key Element C. Both A & B D. None of the above	**C**
44.	In two phase method phase the phase1 start with _____ A. If solution is feasible B. If solution is infeasible C. If solution is unbounded D. None of the above	**B**

45.	Variables are unrestricted in nature means what? A. Variable values are positive B. Variable values are negative C. Both A & B D. None of the above	**C**
46.	What is degenerate solution in transportation problem? A. Number of stone square less than required stone square B. Number of stone square greater than required stone square C. Number of water square less than required water square D. Number of water square greater than required water square	**A**
47.	In minimization cases , _____ are assigned to the artificial variables as their coefficients in the objective function A. +m B. –m C. 0 D. None of the above	**B**
48.	What is unbalanced transportation problem? A. Total number of stone square less than total number water square B. Total number of water square less than total number stone square C. Total supply is not equal to total demand D. None of the above	**C**
49.	In Transportation Problem, the initial solution can be generated how many ways A. One B. Two C. Three D. None of the above	**C**
50.	The purpose of the stepping-stone method is to A. Develop the initial solution to the transportation problem. B. Determine whether a given solution is feasible or not. C. Assist one in moving from an initial feasible solution to the optimal solution. D. Identify the relevant costs in a transportation problem	**C**
51.	When total supply is equal to total demand in a transportation problem, the problem is said to be 1. A. Degenerate B. Balanced C. Unbalanced D. None of the above	**B**
52.	Which method is used for solving LPP in a finite number of stages? A. Simplex algorithm B. Simplex variable C. M method D. Simplex method	**D**
53.	What is LCM ? A. LabelChange Method B. Least Cost Method C. LimittedChange Method D. None of the above	**B**

54.	Which of the following is a not special case in transportation problem? A. Unbalanced transportation problem B. Maximized transportation problem C. Prohibited routes transportation problem D. None of the above	**D**
55.	Which of the following is a special case in transportation problem? A. Modified Distribution Method B. Stepping stone C. Maximization Objective D. Travelling salesman	**C**
56.	In VAM to a profit maximization problem, row and column penalties are determined by: A. Finding the largest unit cost in each row or column. B. Finding the smallest unit cost in each row or column. C. Finding the difference between the two lowest unit costs in each row and column. D. Finding the difference between the two highest unit costs in each row and column.	**C**
57.	What is the size of matrix in assignment problems? A. m x n B. n x m C. n x n D. None of the above	**C**
58.	What is CPA? A. Critical Power Analysis. B. Critical Payment Analysis. C. Critical Path Algorithm D. Critical Path Analysis	**D**
59.	In network not contain more than one critical path exist? A. Yes B. No	**B**
60.	PERT ffsd A. (a+4m+b)/3 B. (a+4m+b)/6 C. (a+4c+2b)/d D. None of the above	**B**
61.	The LCM requires that we start allocating units to shipping routes in the: A. Lower right corner of the table. B. Upper right corner of the table. C. Highest costly cell of the table. D. Upper left-hand corner of the table.	**C**
62.	Which of the following is not used to come up with a solution to the transportation problem? A. MODI method B. northwest corner method C. stepping-stone method D. Hungarian method	**D**

63.	Which of the following is a float time A. Total Float B. Frequency Float C. Activity Float D. Parallel Float	**A**
64.	Which of the following is a zero-sum game? A. Prisoners' dilemma B. Chess C. A cartel member's decision regarding whether or not to cheat D. All of the above	**B**
65.	To represent event in a network diagram used. A. Arrows B. Circles C. Squares D. Rectangles	**B**
66.	A common assumption about the players in a game is that A. neither player knows the payoff matrix. B. the players have different information about the payoff matrix. C. only one of the players pursues a rational strategy. D. the specific identity of the players is irrelevant to the play of the game.	**D**
67.	In a zero-sum game, A. what one player wins, the other loses. B. the sum of each player's winnings if the game is played many times must be zero. C. the game is fair—each person has an equal chance of winning. D. long-run profits must be zero.	**A**
68.	Which of the following is not game type? A. Nonzero-sum game. B. zero-sum game C. Both A & B D. None of the above	**D**
69.	Who is the father of game theory? A. John von Neumann B. Emile Borel C. Kenneth Binmore D. None of the above	**A**
70.	In game theory negative values in playoff matrix indicate? A. Having loss to one of the player B. Having again to one of the player C. Both A & B D. None of the above	**C**
71.	What is row Dominance? A. If all the elements of a Row-i< = Row-j, then the Row-i is dominated by the Row-j and it is removed from the matrix. B. If all the elements of a Row-i> = Row-j, then the Row-i is dominated by the Row-j and it is removed from the matrix. C. If all the elements of a Row-i< = Row-j, then the Row-j is dominated by the Row-j and it is removed from the matrix. D. None of the above	**A**

72.	Zero sum game has to be a _____ game. A. Single player B. Two player C. Multiplayer D. Three player	**C**
73.	How many types of zero sum game? A. One B. Two C. Three D. None of the above	
74.	Check from following which playoff matrix having saddle point? A. $\begin{bmatrix}3 & 2\\4 & 5\end{bmatrix}$ B. $\begin{bmatrix}5 & 2\\7 & 9\end{bmatrix}$ C. $\begin{bmatrix}6 & 9\\13 & 5\end{bmatrix}$ D. $\begin{bmatrix}10 & 2\\-4 & 5\end{bmatrix}$	**A**
75.	Check from following which playoff matrix having column dominance? A. $\begin{bmatrix}13 & -2\\14 & 15\end{bmatrix}$ B. $\begin{bmatrix}50 & 20\\70 & 90\end{bmatrix}$ C. $\begin{bmatrix}-6 & 19\\-5 & 12\end{bmatrix}$ D. $\begin{bmatrix}20 & 25\\25 & 10\end{bmatrix}$	**C**
76.	Which is not of type mixed strategy game? A. 2 x 2 B. 2 x n C. m x n D. None of the above	**D**
77.	Which is the method used to solve mixed strategy game? A. Algebraic Method B. Sub game Method C. Graphical Method D. None of the above	**D**
78.	If the payoff matrix of the type “m x n” size then which methods not used to solve A. Algebraic Method B. Sub game Method C. Dominance Method D. Simplex Method	**A**
79.	If the payoff matrix of the type “2 x n or m x 2” size then which methods used to solve A. Big Omega Method B. Pickup Method C. Sub game Method D. None of the above	**C**
80.	Each participant in game is called A. Player B. Strategy C. Payoff D. Game	**A**
81.	What is first step to solve problem of mixed strategy game? A. Finding sub games B. Finding Saddle point C. Finding row and column dominance D. None of the above	**B**

82.	A play of the game occurs when each player has chosen A. Player B. Strategy C. Both A & B D. None of the above	**B**
83.	A game with two players, where a gain of one player equals the loss to the other is known A. Multiple person zero sum game B. One person zero sum game C. Two person zero sum game D. Three player	**C**
84.	In game theory which following problem cannot solved using graphical method? A. 2 x n B. m x 2 C. m x n D. None of the above	**C**
85.	In game theory which following problem can be solved using graphical method? A. 2 x n B. 3 x 4 C. m x n D. All of the above	**A**
86.	What is column Dominance? A. If all the elements of a Column-i< = Column-j, then the Column-i is dominated by the Column-j and it is removed from the matrix. B. If all the elements of a Column-i> = Column-j, then the Column-i is dominated by the Column-j and it is removed from the matrix. C. If all the elements of a Column-i< = Column-j, then the Column-j is dominated by the Column-j and it is removed from the matrix. D. None of the above	**B**
87.	PERT analysis is based on A. optimistic time B. pessimistic time C. most likely time D. all the above.	**D**
88.	In which phase is optimization done and how does that phase also checks for optimality conditions? A. Phase III B. Phase I C. Phase II D. None of the above	**C**
89.	Which of these statements about the stepping-stone method is best? A. Only squares containing assigned shipments can be used to trace a path back to an empty square. B. An improvement index that is a net positive means that the initial solution can be improved. C. A dummy source and destination must be added if the number of rows plus columns minus 1 is not equal to the number of filled squares. D. Only empty squares can be used to trace a path back to a square containing an assigned shipment.	**A**

90.	Dual simplex method solve for which type of objective A. Maximize B. Minimize C. Both A & B D. None of the above	**B**
91.	The difference between the maximum time available and the actual time needed to perform an activity is known as _____ A. Free float B. Independent float C. Total float D. Half float	**C**
92.	Which of the following is a special case in assignment problem? A. Modified Distribution Method B. Stepping stone C. Prohibited routes D. Travelling salesman	**D**
93.	What is VAM? A. Variable Assignment Method B. Vogel's approximation method Prohibited routes C. Both A& B D. None of the above	**B**
94.	An Algebraic Method used to solve ___ which type of payoff matrix A. 2 x 2 B. 2 x n C. m x 2 D. m x n	**A**
95.	The queuing theory is used to _____ A. Analyze computer B. Telecommunication systems / Traffic systems C. Logistic/ Manufacturing systems. D. All of the above	**D**
96.	The total cost of a queuing system is typically calculated as the A. waiting cost. B. service cost. C. sum of waiting cost and service cost. D. difference of the waiting cost and service cost.	**C**
97.	The case in which a customer joins a queue but then leaves before being served is called A. balking. B. reneging. C. first-in, first-out. D. finite queue length.	**A**

98.	Which are elements of Queuing System i. Arrival/Input Process ii. Waiting Process iii. Queuing/Service Discipline iv. Customer Behaviors v. Service Facility/ Mechanism vi. System Output A. i iii, iv , v , vi B. i , ii, iv , vi C. i , ii, iii, iv, vi D. i , ii, iii, iv , v , vi	**D**
99.	What is SIRO A. Scientific in Research Order (SIRO) B. Service in Random Order (SIRO) C. Scientific in Research Operation (SIRO) D. None of the above	**B**
100.	In most basic queuing models, the size of the arrival population is assumed to be _____. A. infinite B. finite C. constant D. all of the above	**A**

	Question Bank of CA 1.3 Programming using C(254103)	ANS
1)	**C Language developed at?** A. AT & T's Bell Laboratories of USA in 1972 B. AT & T's Bell Laboratories of USA in 1970 C. Sun Microsystems in 1973 D. Cambridge University in 1972	A
2)	**For 16-bit compiler allowable range for integer constants is _____?** A. -3.4e38 to 3.4e38 B. -32767 to 32768 C. -32768 to 32767 D. -32668 to 3266	C
3)	**C programs are converted into machine language with the help of** A. An Editor B. A compiler C. An operating system D. None of the above	B
4)	**A C variable cannot start with** A. An alphabet B. A number C. A special symbol other than underscore D. both (b) and (c)	D
5)	**Which of the following is allowed in a C Arithmetic instruction** A. [] B.{} C. () D. None of the above	C
6)	**Which of the following shows the correct hierarchy of arithmetic operations in C** A./+*- B.*-/+ C.+-/* D.*/+-	D
7)	**What is an array?** A. An array is a collection of variables that are of the dissimilar data type. B. An array is a collection of variables that are of the same data type. C. An array is not a collection of variables that are of the same data type. D. None of the above.	B
8)	**9. What is right way to Initialization array?** A. intnum[6] = { 2, 4, 12, 5, 45, 5 } ; B. intn{} = { 2, 4, 12, 5, 45, 5 } ; C. intn{6} = { 2, 4, 12 } ; D. intn(6) = { 2, 4, 12, 5, 45, 5 };	A

9)	**An array elements are always stored in _____ memory locations.** A. Sequential B. Random C. Sequential and Random D. None of the above	A
10)	**What is the right way to access value of structure variable book{ price, page }?** A. printf("%d%d", book.price, book.page); B. printf("%d%d", price.book, page.book); C. printf("%d%d", price::book, page::book); D. printf("%d%d", price->book, page->book);	A
11)	Which keyword can be used for coming out of recursion? **A.** break **B.** return **C.** exit **D.** Both (a) and (b)	B
12)	**Bitwise operators can operate upon?** A. double and chars B. floats and doubles C. ints and floats D. ints and chars	D
13)	**What is C Tokens?** A. The smallest individual units of c program B. The basic element recognized by the compiler C. The largest individual units of program D. A & B Both	D
14)	**What is Keywords?** A. Keywords have some predefine meanings and these meanings can be changed. B. Keywords have some unknown meanings and these meanings cannot be changed. C. Keywords have some predefine meanings and these meanings cannot be changed. D. None of the above	C
15)	**What is constant?** A. Constants have fixed values that do not change during the execution of a program B. Constants have fixed values that change during the execution of a program C. Constants have unknown values that may be change during the execution of a program D. None of the above	A
16)	**Which is the right way to declare constant in C?** A. int constant var =10; B. intconstvar = 10; C. constintvar = 10; D. B & C Both	D

17)	**Which operators are known as Ternary Operator?** A. ::, ? B.?,: C.?,;; D. None of the above	B
18)	**In switch statement, each case instance value must be _____?** A. Constant B. Variable C. Special Symbol D. None of the above	A
19)	**What is the work of break keyword?** A. Halt execution of program B. Restart execution of program C. Exit from loop or switch statement D. None of the above	C
20)	**For the below definition what is the data type of 'PI'** **#define PI 3.141** A - Its float B - Its double C - There is no type associated with PI, as it's just a text substitution D - Syntax error, semi colon is missing with the definition of PI	C
21)	**The statement printf("%c", 100); will print?** A. prints 100 B. print garbage C. prints ASCII equivalent of 100 D. None of the above	C
22)	**The _____ memory allocation function modifies the previous allocated space.** A. calloc B. free C. malloc D. realloc	D
23)	**The following code 'for(;;)' represents an infinite loop. It can be terminated by.** A. break B. exit(0) C. abort() D. All of the mentioned	A
24)	**Which is the correct syntax to declare constant pointer?** A. int *constconstPtr; B. *int constant constPtr; C. constint *constPtr; D. A and C both	D

25)	**What will be the output of the following program ?**
	
	void main()
	{
	int a = 2;
	switch(a)
	{
	case 1:
	printf("goodbye"); break;
	case 2:
	continue;
	case 3:
	printf("bye");
	}
	}
	
	A)error
	B)goodbye
	C)bye
	D)byegoodby
		A

26)	**What is the use of getchar()?** A. The next input character each time it is called B. EOF when it encounters end of file. C. Both a & b D. None of the mentioned	C
27)	**Which operator connects the structure name to its member name?** a) – b) <- c) . d) Both <- and .	C

28)	**What will be output if you will compile and execute the following c code?**
	
	void main()
	{
	if(printf("cquestionbank"))
	printf("I know c");
	else
	printf("I know c++");
	}
	
	A) I know c
	B) I know c++
	C) cquestionbankI know c
	D) cquestionbankI know c++
		C

29)	**What will be output if you will compile and execute the following c code?**
	#define message "union is power of c"
	void main()
	{
	clrscr();
	printf("%s",message);
	getch();
	}
	
	A) union is power of c
	B) union is Power of c
	C) Compiler error
	D) None of these
		A

30)	**Bitwise operators can operate upon?** A. double and chars B. floats and doubles C. ints and floats D. ints and chars	D

31)	**What will be the output of the following C code?**
	
	#include <stdio.h>
	void main()
	{
	char *s = "hello";
	char *p = s;
	printf("%p\t%p", p, s);
	}
	
	A) Different address is printed
	B) Same address is printed
	C) Run time error
	D) Nothing
		B

32)	**What is the output of the following code?**
	main()
	{
	int x = 5;
	
	if(x=5)
	{
	if(x=5) break;
	printf("Hello");
	}
	printf("Hi");
	}
	
	A - Compile error
	B - Hi
	C - HelloHi
	D - Compiler warning
		A

33)	**What is the built in library function to adjust the allocated dynamic memory size.** A - malloc B - calloc C - realloc D –resize	B

34)	**What will be the output of the following C code?**
	#include <stdio.h>
	void main()
	{
	int x = 5;
	if (true);
	printf("hello");
	}
	
	A) It will display hello
	B) It will throw an error
	C) Nothing will be displayed
	D) Compiler dependent
		B

35)	**Which keyword can be used for coming out of recursion?** A) break B) return C) exit D) both break and return	B

36)	**A character variable can at a time store ?** A. 1 character B. 8 charactCr C. 254 character D. None of above	A
37)	**Which of the following is false in C ?** A. Keywords cannot be used as variable names B. Variable names can contain a digit C. Variable names do not contain a blank space D. Capital letters can be used in variable names	A
38)	**The single character input/output functions are ?** A.scanf( ) and printf( ) B.getchar( ) and printf( ) C.scanf( ) and putchar( ) D.getchar( ) and putchar( )	B
39)	**In which header file Null macro is defined?** A. stdio.h B. iostream.h C. string.h D. pre-processor	A
40)	**Null macro is ?** A. A macro with name Null B. A macro which represents Null pointer C. A macro defined with no name D. None of Above	B

41)	**How many times CppBuzz.com is printed?**
	
	int main()
	{
	int a = 0;
	while(a++);
	{
	printf("CppBuzz.com");
	}
	return 0;
	}
	
	(A) 0 time
	(B) 1 time
	(C) Compilation Error
	(D) Infinite times
		B

42)	**How many times CppBuzz.com is printed on console?**
	int main()
	{
	int a = 0;
	while(a++)
	{
	printf("CppBuzz.com");
	}
	return 0;
	}
	
	(A) Nothing is printed on screen
	(B) 0 time
	(C) 1 time
	(D) Infinite times
		A

43)	**When C Language was invented?** (A) 1970 (B) 1972 (C) 1978 (D) 1979	B
44)	**Name the function whose definition can be substituted at a place where its function call is made _____** a) friends function b) inline function c) volatile function d) external function	B
45)	**What is the following is invalid header file in C?** (A) math.h (B) mathio.h (C) string.h (D) ctype.h	B
46)	**Libray function getch() belongs to which header file?** (A) stdio.h (B) conio.h (C) stdlib.h (D) stdlibio.h	B
47)	**Library function pow() belongs to which header file?** (A) mathio.h (B) math.h (C) square.h (D) stdio.h	B
48)	**Is it possible to run program without main() function?** (A) Yes (B) No	B

49)	**What is sizeof() in C?** (A) Operator (B) Function (C) Macro (D) None of these	B

50)	**What is the output of following code?**
	int main()
	{
	int a = 5;
	int b = 10;
	int c = a+b;
	printf("%i",c);
	}
	
	(A) 0
	(B) 15
	(C) Undefined i
	(D) Any other Compiler Error
		B

51)	**Which of the following ways are correct to include header file in C program?** (A) #include<stdio.h> (B) #include"stdio.h" (C) # stdio.h (D) Both A & B	D
52)	**Will compiler produce any compilation error if same header file is included two times?** (A) Yes (B) No	B
53)	**How does the string is stored in the memory?** A) Contiguous B) Non-contiguous C) Null D) sequence	A

54)	**What is the output of the following code?**
	#include "stdio.h"
	int a = 20;
	int main()
	{
	int a = 10;
	printf("%d", a);
	return 0;
	}
	
	(A) 20
	(B) Ambiguity Error
	(C) 10
	(D) 0
		C

55)	**What is the output of the following code?**
	
	#include "stdio.h"
	int main()
	{
	int a = 10, b = 20;
	if(a=b)
	{
	printf("Easy");
	}
	else
	{
	printf("Hard");
	}
	
	return 0;
	}
	
	(A) Easy
	(B) Hard
	(C) EasyHard
	(D) Error in program
		A

56)	**Does this program get compiled successfully?**
	#include stdio.h
	
	int main()
	{
	printf("CppBuzz.com");
	return 0;
	
	}
	
	(A) Yes
	(B) No
	(C) Depend on processor
	(D) Error in program
		B

57)	**The format identifier '%i' is also used for _____ data type.** A) char B) int C) float D) double	B
58)	**Which of the following is a logical AND operator?** A) ! B) && C) || D) &	B

59)	**Prototype of a function means _____** A. Name of Function B. Output of Function C. Declaration of Function D. Input of a Function	C
60)	**Name the loop that executes at least once.** A. For B. If C. do-while D. while	C
61)	**What is a null pointer?** a. Null pointer is a pointer which is pointing to nothing b. Null pointer points the base address of segment c. Pointer which is initialized with NULL value is considered as NULL pointer. d. All of the above	D
62)	**C language was invented in which laboratories.?** A) Uniliver Labs B) IBM Labs C) AT&T Bell Labs D) Verizon Labs	C
63)	**Each statement in a C program should end with.?** A) Semicolon ; B) Colon : C) Period . (dot symbol) D) None of the above.	A
64)	**Types of Integers are.?** A) short B) int C) long D) All the above	D
65)	**Which of the following cannot be a structure member?** a) Another structure b) Function c) Array d) None of the mentioned	B
66)	Which of the following correctly shows the hierarchy of arithmetic operations in C? A. / + * - B. * - / + C. + - / * D. / * + -	D

67)	**What characters are allowed in a C function name identifier?** A) Alphabets, Numbers, %, $, _ B) Alphabets, Numbers, Underscore (_) C) Alphabets, Numbers, dollar $ D) Alphabets, Numbers, %	B
68)	**Arguments passed to a function in C language are called ___ arguments.** A) Formal arguments B) Actual Arguments C) Definite Arguments D) Ideal Arguments	B
69)	**Arguments received by a function in C language are called ___ arguments.** A) Definite arguments B) Formal arguments C) Actual arguments D) Ideal arguments	B
70)	**Choose a non Library C function below.** A) printf() B) scanf() C) fprintf() D) printf2()	D
71)	**What is the dimension of the C array int ary[10][5].?** A) 1 B) 2 C) 5 D) 10	B
72)	**What is the dimension of the below C Array.** int ary[]={1,3,5,7}; A) 1 B) 2 C) 3 D) 5	A
73)	**Array of Arrays is also called.** A) Multi Data Array B) Multi Size Array C) Multi Dimensional Array D) Multi Byte Array	C
74)	**What is the minimum number of functions to be present in a C Program.** A) 1 B) 2 C) 3 D) 4	A
75)	**How do you accept a Multi Word Input in C Language.** A) SCANF B) GETS C) GETC D) FINDS	C

76)	**Processor Directive in C language starts with.?** A) $ symbol (DOLLAR) B) @ symbol (At The Rate) C) & symbol (Ampersand) D) # symbol (HASH)	D
77)	**What is the abbreviation of C STDIO in stdio.h.?** A) Standard Input Output B) String Terminating Operations Input Output C) Store Input Output D) None of the above	A
78)	**If the two strings are identical, then strcmp() function returns** A) -1 B) 1 C) 0 D) Yes	C
79)	**A pointer pointing to a memory location of the variable even after deletion of the variable is known as _____** A. far pointer B. dangling pointer C. null pointer D. void pointer	B
80)	**Which standard library function will you use to find the last occurance of a character in a string in C?** A) strnchar() B) strchar() C) strrchar() D) strrchr()	D

81)	**What is the output of this program?**
	
	#include <iostream>
	using namespace std;
	int main()
	{
	printf("value is = %d", (10 ++));
	return 0;
	}
	
	a) 10
	b) 11
	c) Compile time error
	d) run time error
		C

82)	**In C Programming strcmp() function is used for** A. Convert String to Char B. Copy two Strings C. Compare two Strings D. None of these	C

83)	**In C Programming '\a' is used for** A. Form feed B. Line Brake C. Select All D. Alarm	D
84)	**Which of the following function sets first n characters of a string to a given character?** A.strinit() B.strnset() C.strset() D.strcset()	B
85)	**How will you free the allocated memory ?** A. remove(var-name); B. free(var-name); C. delete(var-name); D. dalloc(var-name);	B
86)	**What will happen if in a C program you assign a value to an array element whose subscript exceeds the size of array?** A. The element will be set to 0. B. The compiler would report an error. C. The program may crash if some important data gets overwritten. D. The array size would appropriately grow.	C
87)	**What is the maximum length of a C String.** A) 32 characters B) 64 characters C) 256 characters D) None of the above	D
88)	**C programming : Match the following:** a. calloc( ) ------- i. Frees previouslyallocated space. b. free( ) ---------- ii. Modifiespreviouslyallocated space. c. malloc( ) ------- iii. Allocates spacefor array. d. realloc( ) ------- iv. Allocatesrequested size ofspace. A. a-iii, b-i, c –iv, d -ii B. a-iii, b-ii, c –i, d -iv C. a-iii, b-iv, c –i, d -ii D. a-iv, b-ii, c –iii, d -i	A
89)	**A pointer pointing to a memory location of the variable even after deletion of the variable is known as _____** A. far pointer B. dangling pointer C. null pointer D. void pointer	B

90)	**How will you print \n on the screen?** A)printf("\n"); B)echo "\\n"; C)printf('\n'); D)printf("\\n");	D
91)	**The Default Parameter Passing Mechanism is called as** A. Call by Value B. Call by Reference C. Call by Address D. Call by Name	A
92)	**Which operator connects the structure name to its member name?** a) – b) <- c) . d) Both <- and .	C
93)	**Array index always start from (C programming)** a. 0 b. 1 c. 2 d. 3	A
94)	**C programming: Which is not a storage class?** a. Auto b. Struct c. Typedef d. Static	B

95)	**What is printed when the sample code is executed?**
	int y[4] = {6, 7, 8, 9};
	int *ptr = y + 2;
	printf("%d\n", ptr[1]);
	
	A) 6
	B) 7
	C) 8
	D) 9
		D

96)	**Which of the following operator can be used to access value at address stored in a pointer variable?** A. * B. # C. && D. @	A
97)	**22. Which one of the following sentences is true?** A. The body of a while loop is executed at least once. B. The body of a do ... while loop is executed at least once. C. The body of a do ... while loop is executed zero or more times. D. A for loop can never be used in place of a while loop.	B

98)	**perror( ) function used to ?** A. Work same as printf() B. prints the error message specified by the compiler C. prints the garbage value assigned by the compiler D. None of the above	B
99)	**signed and unsigned representation is available for.?** A) short, int, long, char B) float, double, long double C) A & B D) None of the above	C
100)	**C programming: To use the function tolower(), which of the following header file should be used** a. string.h b. conio.h c. ctype.h d. None of the mentioned	C

****