1	Fill in the blanks with words given below: The airline requested a _____ call to ensure a seat on my flight back.				
	a)confirm	b)confirmed	c)confirming	d)confirmation	(d)
2	Rough:Smooth Surface :_____ Choose the correct option below:				
	a)Veneer	b)Interior	c)Appearance	d)Horizontal	(b)
3	Identify the collective noun in the following sentence: My eldest brother could not come but otherwise my whole family attended the ceremony.				
	a) ceremony	b)brother	c)family	d)eldest	(c)
4	Choose the correct meaning of proverb/idiom: "To hit the nail right on the head"				
	a)To do the right thing	b)To destroy one's reputation	c)To announce one's fixed views	d)To harm someone	(a)
5	Practically, very little work could be completed in the last week as it was _____				
	a) full of working days	b) a very hectic week	c) full of holidays	d) a very busy week	(c)
6	Let A={$x : x \in Z$ and $x^2 \leq 4$} and B = {$x : x \in R$ and $x^2 - 3x + 2 = 0$}. Then,				
	a) A = B	b) A ≠ B	c) A ∈ B	d) A ∉ B	**B** A ≠ B
7	Let A = { 1,2,3,4,5,6,7,8,9,10} and B = {3,5,7,9} then which of the following is true?				
	a) A ∩ B = A	b) A ∩ B = B	c) A ∩ B ≠ B	d) A ∩ B = A U B	**B** A ∩ B = B
8	In a society, 50 people speak English, 20 speak Hindi and 10 speak both Engish and Hindi. The number of people who speak atleast one of these two languages, is				
	a) 40	b) 20	c) 60	d) 80	**C** 60
9	Variance of the data (2,4,5,6,8,17) is 23.33. Then, variance of (4, 8,10,12,16,34) is:				
	a) 23.33	b) 25.33	c) 46.66	d) 48.66	**C** 46.66
10	The measure of variability which is independent of units, is called				
	a) Mean deviation	b) Variance	c) Standard deviation	**d)** Coefficient of variation	**D** Coefficient of variation
11	The total number of elementary events associated to the random experiment of throwing three die together is:				
	a) 210	b) 216	c) 215	d) 220	**B** 216

12	If A and B are mutually exclusive events, then					
	a) $P(A) \leq P(\bar{B})$	b) $P(A) \geq P(\bar{B})$	c) $P(A) < P(\bar{B})$	d) $P(A) > P(\bar{B})$	**A**	$P(A) \leq P(\bar{B})$
13	If $P(x)$ is a 4 degree polynomial, then number of roots are:					
	a)1	b)2	c)3	d)4	**D**	4
14	A polynomial equation has :					
	a) Atleast two roots	b) Atleast one root	c) Atmost three roots	d) Atmost two roots	**B**	Atleast one root
15	The Cartesian form of $2(\cos 0^0 + i \sin 0^0)$:					
	a) $2 + i$	b) $2 + 0i$	c) $2 + 2i$	d) $2 - 2i$	**B**	$2 + 0i$
16	Find the missing numbers in the following series: 1,2,5,7,11,__,19					
	a)13	b)14	c)15	d)16	b	14
17	Replace the ? with an appropriate number in the series 6,12,24,42,66,?					
	a) 76	b) 86	c) 94	d) 96	d	96
18	Find the missing letter series from the following : AD,EH,IL,__,QT,UX					
	a)MN	b)MO	c)MP	d)MQ	c	MP
19	Find the missing letter series from the following: AZ,BY,CX,DW,__					
	a)EX	b)EU	c)EY	d)EV	d	EV
20	Select the lettered pair out of the pair of words given that express the relationship that is most familiar to the capitalized pair given in question. SCISSORS:CLOTH ::					
	a)Axe:Wood	b)Stone:Grinder	c)Knife:Stone	d)Gun:Hunt	a	Axe:Wood
21	Select the lettered pair out of the pair of words given that express the relationship that is most familiar to the capitalized pair given in question. DOCTOR : HOSPITAL ::					
	a)sports fan: stadium	b)cow:farm	c)professor: college	d)criminal:jail	c	professor: college
22	Select the lettered pair out of the pair of words given that express the relationship that is most familiar to the capitalized pair given in question. STOOL : BENCH					
	a)chair:table	b)carpenter:chair	c)foot rule :yardstick	d)glass:cup	c	foot rule :yardstick
23	In a given code SISTER is coded as 535301. UNCLE as 84670 and BOY as 129. How is RUSTIC written in the code?					
	a)633185	b)185336	c)363815	d)581363	b	185336

24	Which one is the smallest country in the world ?					
	a)Spain	b)Chili	c) Peru	d) Vatican city	d	Vatican city
25	Which country own the 2018 FIFA worldcup ?					
	a)Spain	b)France	c)Brazil	d)USA	b	France

26	In theory of computation, DFA stands for					
	a)Deterministic Finite Automaton	b)Daniel Floyd Algorithm	c)David Floyd Algorithm	d)Deterministic Flooding Algorithm		(a)
27	The Chomsky Hierarchy is related to classification of					
	a) time complexity of algorithms	b) Moore machines	c) Mealy machines	d) grammars		(d)
28	Regular expressions can be used to specify the strings of					
	a)Type 3 languages only	b)Type 2 Languages only	c)Type 1 languages only	d) None of these		(a)
29	Which of the following strings will match the regular expression (1*01*01*)*. P. 10001 Q. 10110101 R. 100001 S. 100100					
	a)P and Q only	b)Q and R only	c)R and S only	d)P and S only		(c)
30	Most modern programming languages can be expressed using					
	a) regular grammar only	b) context free grammar and not regular	c) context sensitive but not context free	d) None of these		(b)
31	The algorithm to convert NFA to DFA is called					
	a) Kleene star algorithm	b) Handle pruning	c) Thompson construction algorithm	d)Subset construction algorithm		(d)
32	Match all items in Group 1 with correct options in Group 2					

Group 1	Group 2
P. Lexical Analyzer	1. PDA
Q. NFA with stack	2. DFA

	R. Linear Bounded Automata	3. Type – 1 Grammar			
	a) P-1, Q-2, R-3	b) P-2, Q-1, R-3	c) P-2, Q-1, R-3	d) P-3, Q-1, R-2	(b)
33	The language that contains palindromes only can be recognized by P. FSA Q. PDA R. Turing machine				
	a) R only	b) Both Q and R only	c) Both P and R only	d) P, Q and R	(d)

34	What is the addition of the binary number 101001+ 010011=?				
	a)010100	b)111100	c)000111	d)101110	b
35	2's complement of 1011011 is				
	a)0100011	b)0110101	c)0100011	d) 0100101	d
36	The excess-3 code for 584 is given by				
	a)100010110111	b)100001110111	c)100010010110	d)100001010110	a
37	The queue is also known as				
	a)Flash memory	b)FILO memory	c) Flash memory	d) FIFO memory	d
38	The Minterms for four variables				
	a) 8	b)16	c)2	d)1	b
39	A K-map (Karnaugh map) is an abstract form of which diagram organized as a squares matrix.				
	a)Block diagram	b)Cycle diagram	c)Square diagram	d) Venn diagram	d
40	One nibble is equal to how many bits				
	a) 4	b)2	c) 16	d)8	a
41	What is the radix of the octal number system?				
	a) 2	b)10	c)8	d)16	c
42	The range of signed decimal numbers that can be represented by 5 bits 1's complement number is				
	a) -31 to 31	b)-15 to 15	c) -63 to 63	d)-7 to 7	b
43	Express -39 in 8-bit 2's complement form				
	a) 11011001	b)01101010	c) 01000101	d) 10101001	a
44	What is the 10's complement of the decimal number 246700				
	a) 753879	b)784993	c)753300	d)996780	c
45	Which one of the following is the fastest to read from and write to than other kind of storage in a computer?				

	a)Floppy disk	b)Hard disk	c) CD-ROM	d) RAM		d
46	Which one of the following is a volatile memory?					
	a)Cache memory	b)Hard Disk	c) DVD	d)CD		a
47	The first instructor of bootstrap loader program of an operating system is stored in _____ .					
	a) RAM	b)Hard Disk	c)BIOS	d)None		c
48	The Communication between the components in a microcomputer takes place via the address and _____ .					
	a)I/O bus	b)Data bus	c) Address bus	d) Control bus		b
49	Which of the following I/O device is a block device?					
	a) Tape drive	b)USB port	c) Keyboard	d)Mouse		a
50	EBCDIC coding scheme uses _____ bits to code different characters.					
	a) 4	b)8	c)16	d)32		b
51	The format specifier %i is used for the data type?					
	a) Char	b) Int	c) Float	d) Long double	b	int
52	Which of the following is not a type of constructor?					
	a) Copy Constructor	b) Parameterized Constructor	c) Default Constructor	d) Friend Constructor	d	Friend Constructor
53	Why reference and pointer are not same because: P: Reference once established cannot be changed Q: Reference cannot be Null R: Reference does not need explicit dereferencing					
	a) Only P	b) Only Q	c) P and Q	d) P, Q and R	d	P, Q and R
54	Which of the following are available only in the class hierarchy chain?					
	a) Public Data Members	b) Private Data Members	c) Protected Data Members	d) Member Functions	c	Protected Data Members
55	Which of the following visibility mode is used as default in class definition?					
	a) Private	b) Protected	c) Public	d) Friend	a	private
56	Who is the father of C language?					
	a) Steve Jobs	b) James Gosling	c) Dennis Ritchie	d) Rasmus Lerdorf	c	Dennis Ritchi

						e
57	The scope of a local variable is: P: The entire program Q: The function in which it is declared R: The set of programs under a project					
	a) Only P	b) Only Q	c) P and Q	d) P,Q and R	b)	Only Q
58	The definition of the function getch() is in which header file?					
	a) stdlib.h	b) conio.h	c) stdio.h	d) stdarg.h	b	conio.h
59	Which of the following is not a valid C variable name?					
	a) int number;	b) float rate;	c) char string;	d) int 12_student;	d	Int 12_student;
60	What is long int in C programming? P: The basic data type of C Q: Qualifier R: Long is the qualifier and int is the basic data type					
	a) Only P	b) Only Q	c) Only C	d) Both P and Q	c)	Only C
61	What is #include <iostream.h>?					
	a) Pre-processor directive	b) Inclusion directive	c) File inclusion directive	d) Both (b) and (c)	a)	Pre-processor directive
62	Postfix notation is also known as					
	a) Reverse Polish Notation	b) Reverse Operand Notation	c) Polish Notation	d) Reverse Operator notation	a)	Reverse Polish Notation
63	A linear list of elements in which deletion can be done from one end (front) and insertion can take place only at the other end (rear) is known as a ?					
	a) Doubly Linked List	b) Stack	c) Queue	d)Tree	c	queue
64	- push() and pop() functions are used in?					
	a) Queue	b) Stack	c) Binary Search Tree	d) Heap	b	Stack
65	The stack data structure is also called?					
	a) FIFO	b) LIFO	c) LILO	d) BST	b	LIFO

66	What is the chromatic number of an n-vertex simple connected graph which does not contain any odd length cycle? Assume n >= 2.					
	a) n	b) n-1	c) 3	d) 2	d	2
67	A graph in which all nodes are of equal degree, is known as					
	a) Regular Graph	b) Complete Graph	c) Multi Graph	d) Non Regular Graph	a	Regular Graph
68	Which of the following is not an application of priority queue?					
	a) Huffman codes	b) Interrupt handling in operating system	c) Undo operation in text editors	d) Bayesian spam filter	c	Undo operation in text editors
69	Which of the following is not a stable sorting algorithm?					
	a) Insertion sort	b) Selection sort	c) Bubble sort	d) Merge sort	b	Selection sort
70	Which of the following is not an in-place sorting algorithm?					
	a) Selection sort	b) Heap sort	c) Quick sort	d) Merge sort	d	Merge sort
71	The search time in hashing is					
	a) O(1)	b) O(n)	c) O(logn)	d) O(nlogn)	b	O(n)
72	In linked list each node contain minimum of two fields. One field is data field to store the data second field is?					
	a) Pointer to character	b) Pointer to integer	c) Pointer to a node	d) Node	c	Pointer to a node
73	In doubly linked lists, traversal can be performed?					
	a) Only in forward direction	b) Only in reverse direction	c) In both directions	d) None	c	In both directions
74	Which of the following forms simplifies and ensures that there are minimal data aggregates and repetitive groups?					

		a) 1NF	b) 2NF	c) 3NF	d) BCNF	A	1NF
75	DCL stands for :						
		a) Data Console Level	b) Data Console Language	c) Data Control Language	d) Data Control Level	C	Data Control Language
76	TCL in dbms stands for:						
		a) Transaction control languages	b) Transaction command languages	c) Transaction connect languages	d) Transaction conection languages	A	Transaction control languages
77	The keyword used with DCL statements is.						
		a) SELECT	b) GRANT	c) DELETE	d) INSERT	B	GRANT
78	Which operation is not allowed in a join view:						
		a) UPDATE	b) INSERT	c) DELETE	d) ADD	D	ADD
79	E-R modelling technique is a :						
		a) Bottom-up approach	b) Top-down approach	c) Left-right approach	d) Right-left approach	B	Top-down approach
80	Every weak entity set can be converted into a strong entity set by:						
		a) using generalization	b) using aggregation	c) adding appropriate attributes	d) using generalization	C	adding appropriate attributes
81	Which of the following is used to delete the entries in the referenced table when the tuple is deleted in referring table?						
		a) Delete cascade	b) Delete	c) Set null	d) drop	A	Delete cascade
82	Which of the following commands is used to delete all rows and free up space from a table?						
		a) DELETE	b) DROP	c) TRUNCATE	d) ALTER	C	TRUNCATE
83	Wildcard in WHERE clause is used when P: An exact match is necessary for a CREATE statement. Q: An exact match is not possible in a SELECT statement. R: An exact match is necessary for a						
		a) Only P	b) Only Q	c) Only R	d) Both P and Q	B	Only Q
84	The SQL constraint that is use to set some value to a field whose value has not been added explicitly is						
		a) DEFAULT	b) NOT NULL	c) UNIQUE	d) CHECK	A	DEFAULT
85	The artificial key that aims to uniquely identify each record in database is						
		a) Foreign key	b) Surrogate key	c) Alternate key	d) Unique key	B	Surrogate key
86	The process to properly define the database tables to provide flexibility, minimized redundancy and data integrity is called						

	a) Data Normalisation	b) Design rationalization	c) Class diagram	**d) Data rationalisation**	**A**	Data Normalisation

87	Given a relation schema R(ABCDEFGH) in first normal form. For the set of dependencies F={ A → B, A → C, CG → H, B → H, G → F}, which dependency is logically implied?					
	a) F—>H	b) C—>H	c) G—>H	d) A—>H	**D**	A—>H

88	The relationship set is represented in E-R diagram as					
	a) Double diamonds	b) Undivided rectangles	c) Dashed lines	d) Diamond	**D**	Diamond

89	An entity set that does not have sufficient attributes to form a primary key is termed as					
	a) Strong entity set	b) Variant set	c) Weak entity set	d) Variable set	**C**	Weak entity set

90	Commit and rollback are related to:					
	a) data integrity	b) data consistency	c) data sharing	**d) data security**	**B**	data consistency

91	A relational database system needs to maintain data about the relations, such as the schema of the relations. This is called :					
	a) Metadata	b) Catalog	c) Log	d) Dictionary	**A**	Metadata

92	The smallest unit of allocation in an Oracle database is :					
	a) Database	b) Instance	c) Tablespace	d) Database Block	**D**	Database Block

93	In OSI model, the dialogue Control and token management are done by					
	a) Session layer	b) Network layer	c)Transport layer	d) Physical Layer	a	Session layer

94	The physical layer in OSI is responsible for					
	a) Routing	b) Bit-by-bit delivery	c) process to process communication	d)File transfer	b	Bit-by-bit delivery

95	Which one of the following is not done by data link layer?					
	a) channel coding	b) framing	c) flow control	d) error control	a	channel coding

96	The time required for a packet to travel from client to server and then server to the client is called?					
	a) JTT	b) PTT	c) RTT	d) STT	c	RTT

97	For large data transfers, _____ is used.					
	a) DMA	b) programmed I/O	c) controller register	d) DBA		A

98	A block device transfers _____					
	a) bytes one by one	b) block of bytes as a unit	c) with unpredictable	d) as a string		B

			response times	stream		
99	The _____ present a uniform device-access interface to the I/O subsystem of Operating System.					
	a) Devices	b) Buses	c) Device drivers	d) I/O systems		C
100	The kernel data structures include _____					
	a) process table	b) open file table	c) close file table	d) Both (b) and (c)		B