M.Sc. Computer Sc.

12P/208/29

540 ·

				Ql	Jestion Booklet No
	(To be t	filled up b	y the can	didate by	blue/black ball-point pen)
Roll No.		:			
Roll No. (Write the dig	gits in words	s)			
Serial No. of	Answer Sh	ieet		***************************************	
Day and Date					(Signature of Invigilator)

INSTRUCTIONS TO CANDIDATES

(Use only blue/black ball-point pen in the space above and on both sides of the Answer Sheet)

- 1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question is missing. In case of faulty Question Booklet bring it to the notice of the Superintendent/Invigilators immediately to obtain a fresh Question Booklet.
- 2. Do not bring any loose paper, written or blank, inside the Examination Hall except the Admit Card without its envelope.
- 3. A separate Answer Sheet is given. It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.
- 4. Write your Roll Number and Serial Number of the Answer Sheet by pen in the space provided above.
- 5. On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.
- 6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and Roll No. and OMR sheet No. on the Question Booklet.
- 7. Any changes in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfairmeans.
- 8. Each question in this Booklet is followed by four alternative answers. For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle in the corresponding row of the Answer Sheet, by pen as mentioned in the guidelines given on the first page of the Answer Sheet.
- **9.** For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
- 10. Note that the answer once filled in ink cannot be changed. If you do not wish to attempt a question, leave all the circles in the corresponding row blank (such question will be awarded zero marks).
- 11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
- 12. Deposit only the OMR Answer Sheet at the end of the Test.
- You are not permitted to leave the Examination Hall until the end of the Test.
- 14. If a candidate attempts to use any form of unfair means, he/she shall be liable to such punishment as the University may determine and impose on him/her.

[उपर्युक्त निर्देश हिन्दी में अन्तिम आवरण-पृष्ठ पर दिये गये हैं।]

No. of Questions: 150

sime:	2 Ho	urs]					1	Full Marks: 450	
Note :		marks. One ma	ırk ı	-	for	each incorrect ar		carries 3 (three) r. Zero mark wil	
		If more than or answer, choose			ers s	eem to be appro	xim	ate to the correct	
1.	Whi	ch of the follow	ing	number system	inco	rporates english	ites english Alphabets also ?		
	(1) I	Binary	(2)	Hexadecimal	(3)	Octal	(4)	Decimal	
2.	RAM	I and ROM are	:						
	(1) Part of primary memory		mory	(2) Part of secondary memory					
	(3) Part of cache memory			ry	(4)) Part of registers			
3.	Logi	c gates are :							
	(1) r	oute finder in a	a cir	cuit	(2)	route blockers	in a	circuit	
	(3) r	oute destructo	r in a	a circuit	(4)	route stoper in	a cir	cuit	
4.	The	exchange of inf	orm	ation occurs in a	a con	nputer system tl	nrou	gh:	
	(1) I	Decimal codes			(2)	Binary codes			
	(3) I	Hexadecimal co	odes		(4)	Octal codes			
5.	Flip	- Flop assumes	whi	ch of the follow	ing c	codes ?			
	(1) (0 & 1	(2)	100 & 110	(3)	1000 & 1110	(4)	1010 & 1100	
6.	If (11	11) ₂ in binary t	hen	(?) ₁₀ in decimal	:				
	(1) 4	1	(2)	5	(3)	6	(4)	7	

7.	If $(6)_{10}$ in decimal then what is in binary $(?)_2$?								
	(1) 110	(2) 111	(3)	101	(4)	1111			
8.	Basic role of Encod	ler is :							
	(1) To create code	s for information	(2)	To provide pat	h to:	information			
	(3) To shortlist inf	ormation	(4)	To block the ro	ute c	of information			
9.	An electronic swite as:	ch as elementary co	mpor	nent of a digital	circu	uit is best called			
	(1) Gate	(2) Logic gate	(3)	Circuit	(4)	Board			
10.	The Hexadecimal o	ligits are 1 to 0 and A	A to:						
	(1) E	(2) F	(3)	G	(4)	D			
11.	In binary system decimal 0.875 is represented by :								
	(1) 0.001	(2) 0.0101	(3)	0.011	(4)	0.111			
12.	The commonly use	d character codes fo	r trai	nsmission is/are	:				
	(1) EBCDIC		(2)	ASCII					
	(3) Both		(4)	None of the abo	ove				
13.	The maximum cou	nt which a 6-bit bina	ıry w	ord can is:					
	(1) 36	(2) 64	(3)	63	(4)	65			
14.	What is binary equ	ivalent of decimal 26	69 ?						
	(1) 100001100	(2) 10001010	(3)	101001011	(4)	10001101			
15.	The Hexadecimal r	number A23F is repr	esent	ed in binary by	:				
	(1) 1010001000111	110	(2)) 1010010000111111					
	(3) 1010001000111	111	(4)	1111001100101010					
16.	A gate is a logic cir	cuit with one or mo	re inp	out signals but :					
	(1) two output sig	nals	(2)	double output s	signa	als			
	(3) one output sign	nals	(4)	three output sig	gnals	3			

17.	In Boolean Algebra, the overbar stands for the NOT Operation and Plus sign stand for :						
	(1) AND operation	a ·		(2)	OR operation		
	(3) NAND operati	on.		(4)	NOR operation	1	
18.	An AND gate has 2	7 inp	uts. How many	inpu	it words are in tr	uth	table ?
	(1) 64	(2)	32	(3)	16	(4)	128
19.	The 2-input XOR g	ate h	as high output o	only	when the input	bits a	are :
	(1) even	(2)	different	(3)	low	(4)	high
20.	Which of the follow	ving	has most widely	use	ed bipolar family	?	
	(1) DTL	(2)	TTL	(3)	ECL	(4)	MOS
21.	1. A device can sink up to 16 mA and can source up to 400 mA. The device is :						
	(1) low power TTL			(2)	high power TT	L	
	(3) standard TTL			(4)	schottky TTL		
22.	Digital design often	n sta	rts by constructi	ng a	:		
	(1) standard table			(2)	two stage table		
	(3) truth table			(4)	two dimension	tabl	e
23.	A combinatorial lo	•				min	g from a single
	(1) Decoder	(2)	Encoder	(3)	Multiplexer	(4)	De-multiplexer
24.	A positive AND ga	ite is	also a negative	:			
	(1) NAND gate	(2)	NOR gate	(3)	AND gate	(4)	OR gate
25.	A shift register can	be u	sed for:				
	(1) Parallel to seria	(1) Parallel to serial conversion			Serial to parallel conversion		
	(3) Digital delay li	ne		(4)	All of the above	e	
			(3)				P.T.O.

26.	Which of the following is first integrated logic family?							
	(1) RTL	(2) DTL	(3) TTL	(4) MOS				
27.	Which of the follow	ving is <i>not</i> functional	lly a complete set?					
	(1) AND, OR	(2) NAND	(3) NOR	(4) AND, OR, NOT				
28.	Which of the follow	ring Boolean Algebra	a rule is wrong ?					
	(1) $O + A = A$	(2) $1 + A = 1$	(3) $A + A = A$	(4) $1. \times = 1$				
29.	$\overline{A} + \overline{B} + \overline{C} + \overline{D}$ repr	esents a :						
	(1) NAND gate	(2) OR gate	(3) EX-OR gate	(4) AND gate				
30.	Reduced form of Bo	oolean expression (A	+ B) (A + C) is:					
	(1) AB + AC	(2) $A + B + C$	(3) $AC + B$	(4) A + BC				
31.	The most frequently	y used function in C	language is :					
	(1) printf()		(2) scanf ()					
	(3) main ()		(4) # include <stdi< th=""><th>o.h></th></stdi<>	o.h>				
32.	The function scanf	() reads:						
	(1) single character	r .	(2) single string					
	(3) all types variab	les	(4) only flat type variables					
33.	The single characte	r input/output are:						
	(1) scanf () and pr	intf()	(2) getchar () and	printf ()				
	(3) getchar () and	putchar ()	(4) scanf () and pu	utchar ()				
34.	The math library is	set up for the user b	y file :					
	(1) float.h	(2) math include	(3) math.h	(4) iomath.h				
35.	The two operators	44 and 11 are :						
	(1) Arithmetic ope	rator	(2) Equality opera	tor				
	(3) Logical operato	or	(4) Bit-wise operat	tors				

36.	The	The comma operator is primarily used in conjunction with:							
	(1)	'for' statement			(2)	'if-else'statemer	ıt		
	(3)	'do-while' state	men	t	(4)	All of the above	?		
37.	The	e most common	use (of one-dimension	n arr	ay in C is the :			
	(1)	String	(2)	Character	(3)	Data	(4)	Functions	
38.	In t	he library of star	ndar	d I/O function o	lefin	ition, data struc	ture	of a file is :	
	(1)	file	(2)	File	(3)	FILE	(4)	file * a	
39.	Fur	nction in a multi	ple p	orogram are :					
	(1)	Automatic or re	egist	er	(2)	External or stati	ic		
	(3)	Static or registe	r	•	(4)	Void			
40.	The	purpose of dec	larin	g a structure is	:				
	(1) To specify a list of structure element								
	(2) To define a new data type								
	(3)	To set appropri	ate a	mount of memo	ry				
	(4)	All of the above	9						
41.	The	e Command used	d to l	list a program is	:				
	(1)	DIR	(2)	LIST	(3)	ENLIST	(4)	ROWLIST	
42.	In I	F statement valu	ıes n	nay be :					
	(1)	Actual number	s		(2)	Expressions			
	(3)	Variables			(4)	All of the above	9		
43.	The	e Oval is used in	flow	chart is:					
	(1)	represent the lo	gica	l beginning and	end	point of a progr	am		
	(2)	to show input/	outp	out operations					
	(3)	to show connec	tion						
	(4)	to show executi	ion						
				(5)				P.T.O.	

44.	The circle is used to:							
	(1) represent a logi	cal beginning of pro	gran	n				
	(2) Input/output o	perations						
	(3) Decision rule di	isplay						
	(4) One portion of	program connection	to o	ther				
45.	The stepwise refine	ment is :						
	(1) Successive filter	ration	(2)	Successive incre	ement			
	(3) Fast growth		(4)	Use of goto stat	ement			
46.	The modular appro	ach of program desi	ign is	related to:				
	(1) Breaking of pro	gram into sub-prog	rams					
	(2) Defining variables separately							
	(3) Use only one scan statement							
	(4) Splitting of pro	gram into functions						
47.	If memory has a un	it which is collectior	n of s	imilar data-type	then it called :			
	(1) File	(2) Pointer	(3)	Register	(4) Array			
48.	If a variable assume	es address of stored	valu	e then it is called	l : ,			
	(1) float	(2) static	(3)	pointer	(4) array			
49.	Polymorphism in C	OOP is:						
	(1) Having more th	nan one meaning	(2)	Having more th	nan one variables			
	(3) Having more th	nan one libraries	(4)	Having more th	nan one class			
50.	Parameter passing	is used in :						
	(1) class		(2)	function				
	(3) input statemen	t	(4)	arrays				
51.	Which is the first st	ep developing any s	oftw	are program?				
	(1) System design	(2) System study	(3)	Coding	(4) Thinking			

52.	What is the maximizero level)?	um number of nodes	in a tree that has N	levels (when root is
	(1) 2^N	(2) $(2^{N+1}-1)$	$(3)^{n} \left(2^{N}-1\right)$	$(4) \left(2^N-2N\right)$
53.	How many different the key value 1, 2 as	nt binary trees can be nd 3 ?	made from the three	e nodes that contain
	(1) 30	(2) 20	(3) 10	(4) 5
54.		om smallest to larges		ich of the following
	(1) Heap sort	(2) Bubble sort	(3) Quick sort	(4) Selection sort
55.	The average number	er of comparisons in s	sequential search is :	; ·
	(1) n^2	(2) $n(n-1)/2$	(3) $n(n+1)/2$	(4) (n+1)/2
56.	Which data structu	re is needed to conve	ert infix notations int	o postfix relations?
	(1) Stack	(2) Queue	(3) Tree	(4) Graph
57.	How many ancesto search tree have?	ors does a node in th	ne Nth level (root le	vel = 0) of a binary
	(1) N	(2) $N+1$	(3) 2^N	(4) $2^N + 1$
58.	Pop and Push opera	ations are used in :		
	(1) Tree	(2) Stack	(3) List	(4) Linked List
59.	'Rear' and 'front' op	erations are used in	:	
	(1) Queue	(2) Tree	(3) Stack	(4) Arrays
60.	Example(s) of O(N)	algorithm is/are:		
	(1) Initializing all o	of the elements in a o	ne-dimensional arra	y to zero
	(2) Incrementing a	ll the elements in a o	ne-dimensional arra	y
	(3) Multiplying tw	o numbers by perfor	ming successive add	lition operations
	(4) All of the above	e		
		(7)		P.T.O.

61.	An	example of a hie	erarc	hial data stru	cture is	3:			
	(1)	Array	(2)	Link List	(3)	Tree	(4)	Queue	
62.	A f	ile containing m	ultip	le indices to t	he data	is called :			
	(1)	Indexed file			(2)	Sequential file			
	(3)	Indexed-sequer	ntial	file	(4)	Inverted file			
63.	An	indexed file offe	ers th	e facility of a	randoi	n file and the ac	cess	method of a :	
	(1)	Sequential file			(2)	Indexed file			
	(3)	Direct access fil	.e		(4)	Random access	file		
64. Data structuring is redefined through a process called:									
	(1)	Structuring pro	cess		(2)	Hierarchical str	uctu	ire	
	(3)	Normalization			(4)	Relation structu	ıre		
65.	A f	ile is :							
	(1)	An abstract dat	a typ	e	(2)	Logical storage	unit		
	(3)	It is usually nor	n-vol	atile	(4)	All of the above	9		
66.	Ho	w many are ther	e me	thods for allo	cating	disk ?		•	
	(1)	Contiguous	(2)	Linked	(3)	Indexed	(4)	All of these	
67 .	Sys	tem supports tw	o ty	pes of files, w	hich ar	e those :			
-	(1)	text files			(2)	executable bina	ry fi	les	
	(3)	both (1) and (2)			(4)	None of these			
68.	File	access methods	are	:					
•	(1)	Sequential acce	SS		(2)	Direct access			
	(3)	Power access			(4)	Both (1) and (2)			
69.	File	e access time is h	ighe	st in case of :					
	(1)	Floppy disk	•		(2)	Cache			
	(3)	Swapping devi	ces		(4)	Magnetic disks			

70.	File record length :						
	(1) Should always be fixed						
	(2) Should always be variable			•			
	(3) Depends upon the size of file						
	(4) Should be chosen to match the data	cha	racteristic				
71.	Gauss - Siedel method is used for :		•				
	(1) to find root of two equations						
	(2) to find square root of one equation						
	(3) to calculate maximum value of a fun	ctic	n				
	(4) to generate coefficients of equations						
72.	The matrix invasion method is used in:						
	(1) Obtaining missing values						
	(2) Obtaining eigen values						
	(3) Solution of single equation						
	(4) Solution of simultaneous equations						
73.	Total number of starting values required	l in	bisection method	d are	: :		
	(1) one (2) two	(3)	three	(4)	four		
74.	Which of the following method is based	on :	concept of tange	nt to	a curve ?		
	(1) Jacobi method	(2)	Bisection metho	od			
	(3) Secant method	(4)	Newton method	d			
75.	A tree with <i>n</i> vertices has:						
	(1) $n-1$ edges (2) n edges	(3)	n+1 edges	(4)	n + 2 edges		
	(9)				P.T.O	•	

76. Spanning tree is:

_								
	(1) subset of a bin	ary tree						
	(2) subset of any t	ree						
	(3) sub-graph of a	tree joining all vertic	ces					
	(4) sub-graph of b	inary tree only joinin	ng all vertices					
77	. A simewit in a							
77.	A circuit is a:	(C) = 1	(a) = 1	(1) = 1				
	(1) Loop	(2) Path	(3) Edge	(4) Directed graph				
78.	If a finite set S has	n elements, then the	power of set S has :					
	(1) 2^{n+1}	(2) 2^n	(3) 2^{n-1}	(4) 2^{n-2}				
70	If A (1 2 2 4) B	- (2 4 6 8) C - (2 4	(= 6) than (A o B) a	o C io				
79.		$= \{2, 4, 6, 8\}, C = \{3, 4\}$						
	(1) {2, 4}	(2) {φ}	(3) {1, 2, 3, 4, 5, 6, 8	3} (4) {4}				
80.	Let $A = \{-2, -1,$	0, 1, 2}. If the function	on $f: A \to R$ be defi	ined by the formula				
	$f(x) = (x^2 + 1)$, then range of f is:							
	(1) {-2, 2}	(2) {1, 2, 4}	(3) {0, 1, 4}	(4) {1, 2, 5}				
81.	If A and B are two	sets then $A \cup (A \cap B)$) equals :					
	(1) A	(2) B	$(3) \ A \cup B$	(4) $A \cap B$				
82.	The truth table of	u(n a a) is:		·				
02.	The truth table of							
	(1) 1110	(2) 0101	(3) 0001	(4) 1001				
83.	The truth table of p	o∧ (~q) is :						
	(1) 1110	(2) 0010	(3) 0001	(4) None of above				
84.	The function $f(x) =$	-2x on R , the set of:	real number is :					
	(1) Injective	(2) Subjective	(3) Bijective	(4) Negative				
85.	How many maxir	num edges excludir	ng self loop, does a	a simple undirected				
	graph of eight vert	rices have ?						
	(1) 7	(2) 8	(3) 28	(4) 14				
		(10)						

	S(0)	= 3, S(1) = 11.						
	The	solution of this	s :					
	(1)	$1+2^k+9^{k-i}$	(2)	$3+8^k$	(3)	$2 + 9^k$	(4) $1+6^k$	
87.	For	m the conjuction	of p	and q for follo	wing	:		
		p : I am rich						
	Wh	ich one is correc	t ans	swer?				
	(1)	I am rich or I ar	n ha	рру	(2)	I am rich	and I am happy	
		q: I am happy				p:I am rie	ch	
		I am neither ric	h no	r happy	(4)	None of a	bove	
		q: I am happy						
88.	Wh	ich of the follow	ing:	statements is in	term	as of p , q , r	and logical conne	ctives?
		I am awake imp	olies	that I work har	:d			
	(1)	$\sim r \rightarrow p$	(2)	$q \rightarrow p$	(3)	$r \rightarrow p$	$(4) p \to q$	
89.		$A = \{1, 2, 3, 4\}, I$ tion it is:	₹ = {	(1, 2), (1, 3), (1,	4), (2,	, 3), (2, 4), ((3, 4)}. Find which	type of
	(1)	Reflexive			(2)	Symmetri	c	
	(3)	Asymmetric			(4)	None of the	he above	
90.	Wri	te recurrence fo	rmu	la for the seque	nce :			
		•		2, 5, 8, 11	, 14,	17,		
	(1)	$a_n=(n+1)$			(2)	$a_n = (n+1)$	1)/2	
	(3)	$a_n = 2 + 3(n-1)$			(4)	$a_n = 2 + 3$	(n-1)	
91.	An	operating system	m ma	anages :				
	(1)	Memory			(2)	Processor		
	(3)	Disk and I/O d	evic	es	(4)	All of the	above	
	•			(11)				P.T.O.

86. The recurrence relation and initial condition is :

S(k) - 10 S(k) + 9S(k - 2) = 0

92.	Round Robin Scheduling is essentially the preemptive version of :					
	(1) FIFO	(2)	FCFS			
	(3) FILO	(4)	Longest time fi	rst		
93.	A translator is best described	l as a :				
	(1) Application software	(2)	System softwar	re		
	(3) Component of hardware	(4)	None of the abo	ove		
94.	Swapping:					
	(1) works best with many si	nall partitions				
	(2) allows many programs t	o use memory s	simultaneously			
	(3) allows each program in turn to use the memory					
	(4) does not work with overlaying					
95.		The initial value of the semaphore that allows only one of the many processors of enter their critical section, is:				
	(1) 8 (2) 1	(3)	16	(4) 0		
96.	Which of the following state	ment is <i>not</i> true	?			
	(1) time sharing is an examp	le of multiprog	ramming			
	(2) JCL is used only to comm	nunicate betwe	en system progr	ammers		
	(3) a batch file contains a se	ries of OS comm	nands			
	(4) primary function of operating system is to make the computer hardware easily usable					
97.	Real time systems are:					
	(1) primarily used on mainf	rame computer	s ·			
	(2) used for monitoring even	nts as they occu	r	·		
	(3) used for program analys	is				
	(4) used for real time interactive users					

	(1) simple to implement					
	(2) used in all major commercial operating systems					
	(3) less efficient in utilization of m	emory				
	(4) useful when fast I/O devices are not available					
99.	. The LRU algorithm :					
	(1) Pages out pages that have been used recently					
	(2) Pages out pages that have not been used recently					
	(3) Pages out pages that have been	n least used recently				
	(4) Pages out the first page in a given	ven area				
100.	Which of the following is character	ristic of an operating sy:				
	(1) Resource management	(2) Error Recove				
	(3) Memory management	(4) All of the abo				
101.	Scheduling is:					
	(1) allowing jobs to use the proces	sor				
	(2) unrelated to performance cons	ideration				
	(3) not require in uniprocessor sys	stem				
	(4) strictly the FIFO	•				
102.	Poor response times are caused :					
	(1) Processor Busy	(2) High I/O rate				
	(3) High Paging rate	(4) All of the above				
(13)						

98. Virtual memory is:

from table and reduce storage space ?		(1) Segmentation						
 (4) Multiple contiguous fixed partitions 104. The meaning of throughout of an operating system is: (1) Number of jobs entered in queue per unit time (2) Number of jobs processed per unit time (3) Number of jobs blocked per unit time (4) Number of jobs waiting in system 105. Paging is: (1) process which transfers pages and data between primary storage and diaccess storage devices (2) process which manages program pages (3) process which manages data memory allocation (4) process related to management of jobs 106. Which SQL command is used for permanent removal of all the rows of from table and reduce storage space? (1) DROP (2) ALTER (3) DELETE (4) TRUNCAT 107. Which OEM tool is used to alter initialization parameters? (1) Data Manager (2) Schema Manager (3) Storage Manager (4) Instance Manager 108. Which of the following SQL Commands would you use to query the data? 		(2) Swapping						
104. The meaning of throughout of an operating system is: (1) Number of jobs entered in queue per unit time (2) Number of jobs processed per unit time (3) Number of jobs blocked per unit time (4) Number of jobs waiting in system 105. Paging is: (1) process which transfers pages and data between primary storage and diaccess storage devices (2) process which manages program pages (3) process which manages data memory allocation (4) process related to management of jobs 106. Which SQL command is used for permanent removal of all the rows of from table and reduce storage space? (1) DROP (2) ALTER (3) DELETE (4) TRUNCATION. 107. Which OEM tool is used to alter initialization parameters? (1) Data Manager (2) Schema Manager (3) Storage Manager (4) Instance Manager		(3) Pure demand pag	ing					
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 (2) Number of jobs processed per unit time (3) Number of jobs blocked per unit time (4) Number of jobs waiting in system 105. Paging is: (1) process which transfers pages and data between primary storage and diaccess storage devices (2) process which manages program pages (3) process which manages data memory allocation (4) process related to management of jobs 106. Which SQL command is used for permanent removal of all the rows of from table and reduce storage space? (1) DROP (2) ALTER (3) DELETE (4) TRUNCAT 107. Which OEM tool is used to alter initialization parameters? (1) Data Manager (2) Schema Manager (3) Storage Manager (4) Instance Manager 108. Which of the following SQL Commands would you use to query the data? 	104.	The meaning of throughout of an operating system is:						
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 (1) Data Manager (2) Schema Manager (3) Storage Manager (4) Instance Manager 108. Which of the following SQL Commands would you use to query the data? 		(1) DROP (2	ALTER	(3) DELETE	(4) TRUNCATE			
(3) Storage Manager (4) Instance Manager 108. Which of the following SQL Commands would you use to query the data?	107.	Which OEM tool is us	ed to alter initializ	zation parameters?				
108. Which of the following SQL Commands would you use to query the data?		(1) Data Manager		(2) Schema Manag	ger			
		(3) Storage Manager		(4) Instance Mana	ger			
(1) DROP (2) SELECT (3) ALTER (4) INSERT	108.	Which of the following	g SQL Commands	s would you use to a	query the data ?			
		(1) DROP (2	SELECT	(3) ALTER	(4) INSERT			
					•			

103. The memory allocation scheme subject to "external" fragmentation is :

P.T.O.

109.	Which of the following SQL Commands is used to add up new records?							
	(1) SEL	ECT	(2)	INSERT	(3)	UPDATE	(4)	DELETE
110.		nagement I is called a :	nforn	nation System (MIS)	structure with o	one i	main Computer
	(1) Hie	rarchical M	IS str	ucture	(2)	Distributed MIS	Sstr	ucture
	(3) Cen	itralized MI	S stri	ucture	(4)	Decentralized N	AIS s	structure
111.	A form	can be used	to:					
	(1) mod	dify records			(2)	delete records		
	(3) form	natted print	out		(4)	All of the above	?	
112.	A list in	alphabetica	al orc	ler:				
	(1) is in	decending	orde	er	(2)	is in ascending	orde	er
	(3) is ro	esult of sort	oper	ation	(4)	both (2) and (3)		
113.	Which o	of the follow	ing i	s a type of DBM	IS so	ftware ?		
	(1) data	abase manip	ulati	ion language	(2)	query language		
	(3) utili	ities			(4)	report writer		
114.	Highest	level in the	hier	archy of data or	gani	zation is called :		
	(1) data	a bank	(2)	database	(3)	data file	(4)	data record
115.	The data	a dictionary	fells	the DBMS :				
	(1) Wha	at files are i	n the	database ?				
	(2) Wha	at attributes	are	procees by data	?			
	(3) Wha	at these files	s con	tains ?				
	(4) All	of the above)					

(15)

116.	Data integrity control:						
	(1) is used to set upper and lower limit of numeric data						
	(2) requires the use of passwords to prohibit unauthorized access to the file						
	(3) has data dictionary keep the date and time of last access, last backup and most recent modifications for files						
	(4) All of the above	c					
117.	Which of the follow	ving is a database ad	ministrator's functio	n?			
	(1) database design	n	(2) backing up the	database			
	(3) performance m	nonitoring	(4) user coordinate	ion			
118.	The relational model uses some unfamiliar terminology, A type is equivalento:						
	(1) Record	(2) Field	(3) File	(4) Database			
119.	The logical data str	ucture with one-to-n	nany relationship is	a :			
	(1) Network	(2) Tree	(3) Chain	(4) Relationship			
120.	If a relation scheme	e is in BCNF, then it i	s also in :				
	(1) 1 NF	(2) 2 NF	(3) 3 NF	(4) None of these			
121.	Coaxial cable has co	onductors with:					
	(1) a common axis		(2) equal resistance	e			
	(3) same diameter		(4) None of these				
122.	Which data common communication link	nunication method k?	is used to send	data over a serial			
	(1) simplex	(2) half duplex	(3) full duplex	(4) All of these			

123.	Λ protocol is a set of rules governing sequence of events that must take place :					
	(1) between peers		(2)	accross an inte	rface	
	(3) between non-p	eers	(4)	None of these		
124.	How many OSI lay	ers are covered	in the X.2	25 standard ?		
	(1) Three	(2) Four	(3)	Two	(4) Seven	
125.	. Communication protocols always have a :					
	(1) set of symbols		(2)	start of header		
	(3) special flag syr	nbols	(4)	BCC		
126.	Λ router operates a	it:				
	(1) Data link layer		(2)	Application lay	yer	
	(3) Network layer		(4)	Physical layer		·
127.	In a Synchronous modem, the received equlizer is called:					
	(1) adaptive equal	izer	(2)	impairment eq	ualizer	
	(3) statistical equa	lizer	(4)	compromise ec	qualizer	
128.	Which of the follow	ving features is p	possible i	n token passing	bus network	?
	(1) unlimited num	bers of stations	(2)	unlimited dista	ances	
	(3) multiple time of	livision	(4)	in-service expa	nsion	
129.	A modem is connec	cted in between	a telepho	ne line and a :		
	(1) Network		(2)	Computer		
	(3) Communication	n adapter	(4)	Serial port		
130.	Which of the follow messages from one	•		used for transfe	ering electron	ic mail
	(1) FTP	(2) SNMP	(3)	SMTP	(4) RPC	,
		(17)			P.T.O.

131.	Which of the following items is <i>not</i> used in Local Area Network (LAN)?					
	(1) Computer (2) Modem	(3) Printer (4) Cable				
132.	Identify the odd term amongst the foll	lowing group :				
	(1) Coaxial cable	(2) Optical fibre				
	(3) Twisted pair wire	(4) Microwave				
133.	Most data communications involving	telegraph lines use :				
	(1) Simplex lines	(2) Wideband channels				
	(3) Narrowband channels	(4) Dialed service				
134.	Which of the following is (are) r Computers?	required to communicate between two				
	(1) Communications software	(2) Protocol				
	(3) Communication hardware	(4) All of the above				
135.	Which of the following network access to a packet switched network?	ss standard is used for connecting stations				
	(1) X.3 (2) X.21	(3) X.25 (4) X.75				
136.	The transistorized computer circuits v	were introduced in the :				
	(1) First generation	(2) Second generation				
	(3) Third generation	(4) Fourth generation				
137.	Which is used for manufacturing chip	os?				
	(1) Bus	(2) Control Unit				
	(3) Semiconductors	(4) Cables				

138.	Which is the alternative name for a diskette?				
	(1) Floppy disk		(2) Hard disk		
	(3) Flexible disk		(4) Winchester di	isk	
139.	Supercomputers a	re primarily usefu	ıl for :		
	(1) Input Output	intensive processi	ing		
	(2) Data retrieval	operations			
	(3) Mathematical	intensive scientifi	c applications		
	(4) All of the abo	ve			
140.	Which of the follo	wing is used for i	nput and output both ?	?	
	(1) Graph plotter		(2) Teletype term	ninal	
	(3) Line printer		(4) All of the abo	ove	
141. Which of the following require logic computer memory?					
	(1) Imaging		(2) Graphics		
	(3) Voice		(4) All of the abo	ove	
142.	Λ beam of light u	sed to record and	retrieve data on optica	l disk is known as :	
	(1) Polarized ligh	nt	(2) unpolarized	concentric light	
	(3) Laser		(4) Coloured ligh	ht	
143.	The CPU chip use	ed in a computer p	partially made out of :		
	(1) Silica	(2) Carbon	(3) Copper	(4) Silver	
144.	The amount of a	cheque is recorded	l in magnetic ink, using	g an :	
	(1) Encoder	(2) Embosser	(3) Inscriber	(4) Imprinter	
145.	Which was the m	ost popular first g	eneration computer?		
	(1) IBM 1650	(2) IBM 360	(3) IBM 1130	(4) IBM 2700	
		(19	9)	P.T.O.	

•		eș a	ttached in a rii	ng without a hos		
(1) Star	(2) Ring	(3)	Bus	(4) Tree		
The larger the RAM of a Computer, the faster is its speed, since its eliminates:						
(1) Need for extern	nal memory	(2)	Need of ROM			
(3) Frequent disk l	/O	(4)	Need for wider	data path		
Which of the follow						
(1) Diasywheel pri	nter	(2)	Chain Printer			
(3) Drum Printer		(4)	Line Printer			
Which computer co	ompany introduced t	he p	rinter laserjet in	1984 ?		
(1) Mitsubishi Elec	etronics	(2)	Ashton - Tate C	Corporation		
(3) Hewlett - Pack	ard Inc.	(4)	Nippon Electro	nic Corporation		
First Computer in I	ndia was manufactu	red	by:			
(1) CMC	(2) ECIL	(3)	BEL	(4) HCL		
	computer, is known (1) Star The larger the RAM (1) Need for extern (3) Frequent disk I Which of the follow (1) Diasywheel pri (3) Drum Printer Which computer co (1) Mitsubishi Electrical (3) Hewlett - Packa First Computer in I	computer, is known as: (1) Star (2) Ring The larger the RAM of a Computer, the (1) Need for external memory (3) Frequent disk I/O Which of the following is a serial printe (1) Diasywheel printer (3) Drum Printer Which computer company introduced to (1) Mitsubishi Electronics (3) Hewlett - Packard Inc. First Computer in India was manufacture.	computer, is known as: (1) Star (2) Ring (3) The larger the RAM of a Computer, the faste (1) Need for external memory (2) (3) Frequent disk I/O (4) Which of the following is a serial printer? (1) Diasywheel printer (2) (3) Drum Printer (4) Which computer company introduced the p (1) Mitsubishi Electronics (2) (3) Hewlett - Packard Inc. (4) First Computer in India was manufactured	computer, is known as: (1) Star (2) Ring (3) Bus The larger the RAM of a Computer, the faster is its speed, sin (1) Need for external memory (2) Need of ROM (3) Frequent disk I/O (4) Need for wider Which of the following is a serial printer? (1) Diasywheel printer (2) Chain Printer (3) Drum Printer (4) Line Printer Which computer company introduced the printer laserjet in (1) Mitsubishi Electronics (2) Ashton - Tate C (3) Hewlett - Packard Inc. (4) Nippon Electronics First Computer in India was manufactured by:		

अभ्यर्थियों के लिए निर्देश

(इस पुस्तिका के प्रथम आवरण-पृष्ठ पर तथा उत्तर-पत्र के दोनों पृष्ठों पर केवल *नीली। काली बाल-प्वाइंट पेन* से ही लिखें)

- 1. प्रश्न पुस्तिका मिलने के 10 मिनट के अन्दर ही देख ले कि प्रश्नपत्र में सभी पृष्ठ मौजूद है और कोई प्रश्न छूटा नहीं है। पुस्तिका दोषयुक्त पाये जाने पर इसकी सूचना तत्काल कक्ष निरीक्षक को देकर सम्पूर्ण प्रश्नपत्र की दूसरी पुस्तिका प्राप्त कर लें।
- 2. परीक्षा भवन में *लिफाफा रहित प्रवेश-पत्र के अतिरिक्त*, लिखा या सादा कोई भी खुला कागज साथ में न लायें।
- 3. उत्तर-पत्र अलग सें दिया गया है। इसे न तों मोड़ें और न ही विकृत करें। दूसरा उत्तर-पत्र नहीं दिया जायेगा। केवल उत्तर-पत्र का ही मूल्यांकन किया जायेगा।
- **4.** अपना *अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन से* निर्धारित स्थान पर लिखें।
- 5. उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ -जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।
- 6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक संख्या और ओ० एम० आर० पत्र संख्या की प्रविष्टियों में उपरिलेखन की अनुमित नहीं है।
- 7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।
- 8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।
- 9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।
- 10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का उत्तर नहीं देना चाहते हैं, तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।
- 11. रफ कार्य के लिये इस पुस्तिका के मुखपृष्ठ के अंदर वाला पृष्ठ तथा अंतिम खाली पृष्ठ का प्रयोग करें।
- 12. परीक्षा के उपरान्त केवल ओ० एम० आर० उत्तर-पत्र ही परीक्षा भवन में जमा करें।
- 13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमित नहीं होगी।
- 14. यदि कोई अभ्यर्थी परीक्षा में अनुचित साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का / की भागी होगा / होगी।