Computer Based Examination System

Exported On *	2022/11/21 16:46:18
Title *	Question Paper Answer Key
OES Exam *	GPSC06202201 / Assistant Professors in Government College in Computer Science/ Completed / 2022-11-19

Question Description

Table A

Id Name Age

12 Arun 60

15 Shreya 24

99 Rohit 11

Table B

Id Name Age

15 Shreya 24

25 Hari 40

98 Rohit 20

99 Rohit 11

Table C

Id Phone Area

10 2200 02

99 2100 01

Consider the above tables A, B and C. How many tuples does the result of the following SQL query contains?

SELECT A.id FROM A WHERE A.age > ALL (SELECT B.age FROM B WHERE B. name = "arun")

	А	4
	В	3
	С	0
	D	1
	E	None of the above
	Correct Answer	В
	Marks	1
2	Question Description	DML is provided for
	A	Description of the logical structure of a database.
	В	The addition of new structures in the database system.
	С	Manipulation & processing of the database.
	D	Definition of a physical structure of the database system.
	E	None of the above
	Correct Answer	C
	Marks	1
3		

Question Description	What will be the output of the following program?
	# include
	void fun (int, int);
	int main()
	{
	int $i = 5, j = 2;$
	fun (i, j);
	printf ("%d %d\n", i, j);
	return 0;
	} void fun (int i int i)
	i = i * i:
	j = j * j;
	}
A	5 2
B	25.4
5	25 4
С	garbage
D	compile time error
E	None of the above
Correct Answer	A
Marks	1

ŀ	Question Description	Which of the join operations do not preserve non matched tuples?
	Α	Left outer join
	В	Right outer join
	С	Inner join
	D	Natural join
	E	None of the above
	Correct Answer	C
	Marks	1
)	Question Description	Which one of the following statements about normal forms is FALSE?
	Α	BCNF is stricter than 3NF
	A B	BCNF is stricter than 3NF Any relation with two attributes is in BCNF
	A B C	BCNF is stricter than 3NF Any relation with two attributes is in BCNF Lossless, dependency-preserving decomposition into 3NF is always possible
	A B C D	BCNF is stricter than 3NF Any relation with two attributes is in BCNF Lossless, dependency-preserving decomposition into 3NF is always possible Lossless, dependency-preserving decomposition into BCNF is always possible
	A B C D E	BCNF is stricter than 3NF Any relation with two attributes is in BCNF Lossless, dependency-preserving decomposition into 3NF is always possible Lossless, dependency-preserving decomposition into BCNF is always possible None of the above
	A B C D E Correct Answer	BCNF is stricter than 3NF Any relation with two attributes is in BCNF Lossless, dependency-preserving decomposition into 3NF is always possible Lossless, dependency-preserving decomposition into BCNF is always possible None of the above D
	A B C D E Correct Answer Marks	BCNF is stricter than 3NF Any relation with two attributes is in BCNF Lossless, dependency-preserving decomposition into 3NF is always possible Lossless, dependency-preserving decomposition into BCNF is always possible None of the above D 1

6	Question Description	The result evaluating the postfix expression 10 5 + 60 6 / * 8 – is
	Α	284
	В	213
	с	142
	D	71
	E	None of the above
	Correct Answer	C
	Marks	1

Question Description	A positive edge-triggered D flip-flop is connected to a positive edge-triggered JK flipflop as follows. The Q output of the D flip-flop is connected to both the J and K inputs of the JK flip-flop, while the Q output of the JK flip-flop is connected to the input of the D flip-flop. Initially, the output of the D flip-flop is set to logic one and the output of the JK flip-flop is cleared. Which one of the following is the bit sequence (including the initial state) generated at the Q output of the JK flip-flop when the flip-flops are connected to a free-running common clock? Assume that $J = K = 1$ is the toggle mode and $J = K = 0$ is the state-holding mode of the JK flip-flop. Both the flip-flops have non-zero propagation delays.
A	011101110
В	0100100
С	0110110
D	011001100
E	None of the above
Correct Answer	c
Marks	1

8	Question Description	CTRL + c is used for
	A	Interrupting the running process
	В	Terminating the running process
	C	Stopping the terminal
	D	Terminating the running process with core dump
	E	None of the above
	Correct Answer	A
	Marks	1

9	Question Description	Given the following binary number in 32 bit (single precision) IEEE-754 format: 0011111001101101000000000000000000000
	A	1.45 X 101
	В	1.45 X 10-1
	С	2.27 X 10-1
	D	2.27 X 101
	E	None of the above
	Correct Answer	c
	Marks	1

⁰ Question Description	Consider a uniprocessor system executing three tasks T1, T2 and T3, each of which is composed of an infinite sequence of jobs (or instances) which arrive periodically at intervals of 3, 7 and 20 milliseconds, respectively. The priority of each task is the inverse of its period and the available tasks are scheduled in order of priority, with the highest priority task scheduled first. Each instance of T1, T2 and T3 requires an execution time of 1, 2 and 4 milliseconds, respectively. Given that all tasks initially arrive at the beginning of the 1st milliseconds and task preemption are allowed, the first instance of T3 completes its execution at the end of milliseconds.
Α	10
В	12
С	14
D	16
E	None of the above
Correct Answer	В
Marks	1

¹ Question Description	A system uses FIFO policy for page replacement. It has 4 page frames with no pages loaded to begin with. The system first accesses 100 distinct pages in some order and then accesses the same 100 pages but now in the reverse order. How many page faults will occur?
Α	196
В	192
С	197
D	195
E	None of the above
Correct Answer	A
Marks	1

² Question Description	Consider the following program in C language:
	<pre>#include <stdio.h> main() { int i; int *pi = &i scanf("%d", pi); printf("%d\n", i+5); } Which one of the following statements is TRUE?</stdio.h></pre>
Α	Compilation fails.
В	Execution results in a run-time error.
С	On execution, the value printed is 5 more than the address of variable i.
D	On execution, the value printed is 5 more than the integer value entered.
E	None of the above
Correct Answer	D
Marks	1

13	Question Description	The number of processes in memory is called
	Α	Degree of parallel processing
	В	Degree of multiprocessing
	C	Degree of multitasking
	D	Degree of multithreading
	E	None of the above
	Correct Answer	C
	Marks	1
14	Question Description	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window
14	Question Description	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant
14	Question Description A B	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly
14	Question Description A B C	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly Increases exponentially
14	Question Description A B C D	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly Increases exponentially First increases linearly and then stays constant
14	Question Description A B C D E	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly Increases exponentially First increases linearly and then stays constant None of the above
14	Question Description A B C D E Correct Answer	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly Increases exponentially First increases linearly and then stays constant None of the above
14	Question Description A B C D E Correct Answer Marks	In the slow start phase of the TCP congestion control algorithm, the size of the congestion window Constant Increases linearly Increases linearly Increases exponentially First increases linearly and then stays constant None of the above C

5	Question Description	Consider a software program that is artificially seeded with 100 faults. While testing this program, 159 faults are detected, out of which 75 faults are from those artificially seeded faults. Assuming that both real and seeded faults are of same nature and have same distribution, the estimated number of undetected real faults is
	A	28
	В	175
	C	56
	D	84
	E	None of the above
	Correct Answer	A
	Marks	1

16	Question Description	Two numbers are chosen independently and uniformly at random from the set {1, 2,, 13}. The probability (rounded off to 3 decimal places) that their 4-bit (unsigned) binary representations have the same most significant bit is
	A	0.5029
	В	0.538
	С	0.461
	D	0.248
	E	None of the above
	Correct Answer	A
	Marks	1

Question Description	A company maintains records of sales made by its salespersons and pays them commission based on each individual's total sales made in a year. This data is maintained in a table with following schema: salesinfo = (salespersonid, totalsales, commission) In a certain year, due to better business results, the company decides to further reward its salespersons by enhancing the
	commission paid to them as per the following formula: If commission $\zeta = 50000$, when as it has 20(
	If commission $\leq = 50000$, enhance it by 2%
	If some sign ≥ 100000 , when as it by $60/$
	The IT staff has written three different SQL scripts to colculate enhancement for each sleb, each of these scripts is to
	The first start has written three different SQL scripts to calculate enhancement for each stab, each of these scripts is to
	T1
	11 Undate salesinfo
	Set commission = commission $*1.02$
	Where commission $\leq = 50000$:
	T2
	Update salesinfo
	Set commission = commission $*$ 1.04
	Where commission > 50000 and commission is $< = 100000$;
	Τ3
	Update salesinfo
	Set commission = commission $*$ 1.06
	Where commission > 100000;
	Which of the following options of running these transactions will update the commission of all salespersons correctly:
A	Execute T1 followed by T2 followed by T3
В	Execute T2 followed by T1 followed by T3

⁸ Question Description	Consider a double hashing scheme in which the primary hash function is $h1(k)=k \mod 23$, and the secondary hash function is $h2(k)=1+(k \mod 19)$. Assume that the table size is 23. Then the address returned by probe 1 in the probe sequence (assume that the probe sequence begins at probe 0) for key value k=90 is:
Α	10
В	11
С	12
D	13
E	None of the above
Correct Answer	D
Marks	1

19	Question Description	Consider the following two statements: I. If all states of an NFA are accepting states then the language accepted by the NFA is Σ^* . II. There exists a regular language A such that for all languages B, A \cap B is regular. Which one of the following is CORRECT?
	A	I is true
	В	II is true
	С	Both I and II are true
	D	Neither I and II are true
	E	None of the above
	Correct Answer	B
	Marks	1

20	Question Description	Consider the following two statements. S1: If a candidate is known to be corrupt, then he will not be elected. S2: If a candidate is kind, he will be elected. Which one of the following statements follows from S1 and S2 as per sound inference rules of logic?
	A	If a person is known to be corrupt, he is kind
	В	If a person is not known to be corrupt, he is not kind
	С	If a person is kind, he is not known to be corrupt
	D	If a person is not kind, he is not known to be corrupt
	E	None of the above
	Correct Answer	C
	Marks	1

21	Question Description	The number of arrangements of six identical balls in three identical bins is
	A	36
	В	21
	С	12
	D	7
	E	None of the above
	Correct Answer	D
	Marks	1

22	Question Description	Let be an arbitrary graph on vertices with edges. Consider the following statements: I)There is a vertex of degree smaller than in. II)There is a vertex such that there are less than vertices at a distance exactly from it. Which of the following is true?
	Α	I only
	В	II only
	С	Both I and II
	D	Neither I and II
	E	None of the above
	Correct Answer	A
	Marks	1

23	Question Description	If a class B network on the Internet has a subnet mask of 255.255.248.0, what is the maximum number of hosts per subnet?
	Α	1024
	В	2000
	c	2046
	D	2048
	E	None of the above
	Correct Answer	C
	Marks	1

24	Question Description	Which of the following is finally produced by Hierarchical Clustering?
	Α	final estimate of cluster centroids
	В	tree showing how close things are to each other
	С	assignment of each point to clusters
	D	all of the mentioned
	E	None of the above
	Correct Answer	В
	Marks	1
25	Question Description	Which of the following is required by K-means clustering?
	Α	defined distance metric
	В	number of clusters
	B C	number of clusters initial guess as to cluster centroids
	B C D	number of clusters initial guess as to cluster centroids all of the mentioned
	B C D E	number of clusters initial guess as to cluster centroids all of the mentioned None of the above
	B C D E Correct Answer	number of clusters initial guess as to cluster centroids all of the mentioned None of the above
	B C D E Correct Answer Marks	number of clusters initial guess as to cluster centroids all of the mentioned None of the above D 1

26	Question Description	Using public key cryptography, X adds a digital signature to message M, encrypts <m, <math="">\sigma>, and sends it to Y, where it is decrypted. Which one of the following sequences of keys is used for the operations?</m,>
	A	Encryption: X's private key followed by Y's private key; Decryption: X's public key followed by Y's public key
	В	Encryption: X's private key followed by Y's public key; Decryption: Y's private key followed by X's public key
	С	Encryption: X's private key followed by Y's public key; Decryption: X's public key followed by Y's private key
	D	Encryption: X's public key followed by Y's private key; Decryption: Y's public key followed by X's private key
	E	None of the above
	Correct Answer	В
	Marks	1

⁷ Question Description	Consider the following C program.
	<pre>#include <stdio.h></stdio.h></pre>
	int main () {
	int $a[4][5] = \{\{1, 2, 3, 4, 5\},\$
	$\{6, 7, 8, 9, 10\},\$
	$\{11, 12, 13, 14, 15\},\$
	$\{16, 17, 18, 19, 20\}\};$
	printf("%d\n", *(*(a+**a+2)+3));
	return(0);
	}
	The output of the program is
Α	18
В	19
С	20
D	14
E	None of the above
Correct Answer	B
Marks	1

28	Question Description	Station A needs to send a message consisting of 9 packets to Station B using a sliding window (window size 3) and go-back-n error control strategy. All packets are ready and immediately available for transmission. If every 5 th packet that A transmits gets lost (but no acks from B ever get lost), then what is the number of packets that A will transmit for sending the message to B?
	Α	20
	В	18
	С	16
	D	14
	E	None of the above
	Correct Answer	C
	Marks	1

29	Question Description	Which of the following are introduced to reduce the overheads caused by the log-based recovery?
	A	Checkpoints
	В	Indices
	C	Deadlocks
	D	Locks
	E	None of the above
	Correct Answer	A
	Marks	1

30	Question Description	Define the connective * for the Boolean variables X and Y as: X * Y = XY + X' Y'. Let Z = X * Y. Consider the following expressions P, Q and R. P: X = Y * Z Q: Y = X * Z R: X * Y * Z=1 Which of the following is TRUE?
	A	P and R are valid
I	В	P and Q are valid
	c	Q and R are valid
1	D	P,Q,R are valid
I	E	None of the above
(Correct Answer	D
I	Marks	1

31	Question Description	The of a counting semaphore indicates the number of processes in the blocked state.
	Α	Positive value
	В	Negative value
	С	The magnitude of negative value
	D	The sign (+/-) of value
	E	None of the above
	Correct Answer	В
	Marks	1
32	Question Description	What is the main disadvantage of spinlocks?
	Α	they are not sufficient for many process
	В	they require busy waiting
	С	they are unreliable sometimes
	D	they are too complex for programmers
	E	None of the above
	Correct Answer	В
	Marks	1

33	Question Description	Consider three CPU-intensive processes, which require 10, 20 and 30 time units and arrive at times 0, 2 and 6, respectively. How many context switches are needed if the operating system implements a shortest remaining time first scheduling algorithm? Do not count the context switches at time zero and at the end.
	Α	4
	В	3
	с	2
	D	1
	E	None of the above
	Correct Answer	C
	Marks	1

⁴ Question Description	What will be the output of the following program?
	# include
	int main()
	float $a = 13.5;$
	float *b, *c;
	b = &a /* suppose address of a is 1006 */
	c = b;
	printf (%u %u %f %f %f \n", b+2, c, *&a, *b, *c+2);
	return 0;
	}
Α	1008 1006 13.500000 13.500000 15.500000
В	1014 1006 13.500000 13.500000 15.500000
с	1014 1006 13.5 13.5 15.5
D	1008 1006 13.500000 13.500000 garbage
E	None of the above
Correct Answer	B
Marks	1

35	Question Description	The following program is to be tested for statement coverage: begin if (a== b) {S1; exit;} else if (c== d) {S2;] else {S3; exit;} S4; end The test cases T1, T2, T3 and T4 given below are expressed in terms of the properties satisfied by the values of variables a, b, c and d. The exact values are not given.
		 T1 : a, b, c and d are all equal T2 : a, b, c and d are all distinct T3 : a = b and c != d T4 : a != b and c = d Which of the test suites given below ensures coverage of statements S1, S2, S3 and S4?
	A	Т1, Т2, Т3
	В	T2, T4
	С	T3, T4
	D	T1, T2, T4
	E	None of the above
	Correct Answer	D
	Marks	1

Question Description	Consider the following C program
	void f(int, short);
	void main()
	{
	int $i = 100;$
	short $s = 12;$
	short $*p = \&s$
	; // call to f()
	Which one of the following expressions, when placed in the blank above, will NOT result in a type checking error?
A	F(i,*p)
В	F(i,*s)
С	i=F(i,s)
D	$F(s,s^*)$
E	None of the above
Correct Answer	A
Marks	1

37	Question Description	Which one of the following enables us to use the entire bandwidth simultaneously?
	A	TDMA
	В	CDMA
	С	FDMA
	D	All of the above
	E	None of the above
	Correct Answer	В
	Marks	1

38	Question Description	Consider the following relation
		Cinema (theater, address, capacity)
		Which of the following options will be needed at the end of the SQL query:
		SELECT P1. address
		FROM Cinema P1
		Such that it always finds the addresses of theatre's with maximum capacity?
	A	WHERE P1. Capacity> = Any (select P2. Capacity from Cinema P2)
	В	WHERE P1. Capacity> = All (select P2. Capacity from Cinema P2)
	С	WHERE P1. Capacity > All (select max(P2. Capacity) from Cinema P2)
	D	WHERE P1. Capacity > Any (select max (P2. Capacity) from Cinema P2)
	E	None of the above
	Correct Answer	B
	Marks	1

39	Question Description	Let X and Y be finite sets and f: X -> Y be a function. Which one of the following statements is TRUE?
	Α	For any subsets A and B of X, $ f(A \cup B) = f(A) + f(B) $
	В	For any subsets A and B of X, $ f(A \cap B) = min\{ f(A) , f (B) \}$
	С	For any subsets S and T of Y, f -1 (S \cap T) = f -1 (S) \cap f -1 (T)
	D	For any subsets A and B of X, $f(A \cap B) = f(A) \cap f(B)$
	E	None of the above
	Correct Answer	C
	Marks	1
40	Question Description	The interval between the time of submission and completion of the job is called
40	Question Description	The interval between the time of submission and completion of the job is called Turnaround time
40	Question Description A B	The interval between the time of submission and completion of the job is called Turnaround time Waiting time
40	Question Description A B C	The interval between the time of submission and completion of the job is called Turnaround time Waiting time Throughput
40	Question Description A B C D	The interval between the time of submission and completion of the job is called Turnaround time Waiting time Throughput Response time
40	Question Description A B C D E	The interval between the time of submission and completion of the job is called Turnaround time Waiting time Throughput Response time None of the above
40	Question Description A B C C D E Correct Answer	The interval between the time of submission and completion of the job is called Turnaround time Waiting time Throughput Response time None of the above
40	Question Description A B C C D C Correct Answer Marks	The interval between the time of submission and completion of the job is called Turnaround time Waiting time Throughput Response time None of the above A

¹ C	Question Description	In a software project, COCOMO (Constructive Cost Model) is used to estimate
A	N	effort and duration based on the size of the software
В	3	size and duration based on the effort of the software
C	;	effort and cost based on the duration of the software
D)	size, effort and duration based on the cost of the software
E		None of the above
С	Correct Answer	A
IV	larks	1

42	Question Description	Which is the desirable property of decomposition?
	A	Partition constraint
	В	Dependency preservation
	с	Redundancy
	D	Security
	E	None of the above
	Correct Answer	В
	Marks	1
43	Question Description	is transmitted with the call initiation request during a mobile call.
43	Question Description	is transmitted with the call initiation request during a mobile call. MIN
43	Question Description A B	is transmitted with the call initiation request during a mobile call. MIN SCM
43	Question Description A B C	is transmitted with the call initiation request during a mobile call. MIN SCM ESN
43	Question Description A B C D	is transmitted with the call initiation request during a mobile call. MIN SCM ESN All of the above
43	Question Description A B C D E	is transmitted with the call initiation request during a mobile call. MIN SCM ESN All of the above None of the above
43	Question Description A B C D E Correct Answer	is transmitted with the call initiation request during a mobile call. MIN SCM ESN All of the above None of the above
43	Question Description A B C D E Correct Answer Marks	is transmitted with the call initiation request during a mobile call. MIN SCM ESN All of the above None of the above 1

4 (Question Description	There are n stations in a slotted LAN. Each station attempts to transmit with a probability p in each time slot. What is the probability that ONLY one station transmits in a given time slot?
	A	np(1-p) ⁿ⁻¹
	В	(1-p) ⁿ⁻¹
(C	p(1-p) ⁿ⁻¹
1	D	1-(1-p) ⁿ⁻¹
1	E	None of the above
	Correct Answer	A
1	Marks	1

⁵ Question Description	Which of the following statements are true?I. Shortest remaining time first scheduling may cause starvationII. Preemptive scheduling may cause starvationIII. Round robin is better than FCFS in terms of response time
A	I only
В	I and III only
С	II and III only
D	I, II and III
E	None of the above
Correct Answer	D
Marks	1

⁶ Question Description	A company needs to develop digital signal processing software for one of its newest inventions. The software is expected to have 40000 lines of code. The company needs to determine the effort in person-months needed to develop this software using the basic COCOMO model. The multiplicative factor for this model is given as 2.8 for the software development on embedded systems, while the exponentiation factor is given as 1.20. What is the estimated effort in person-months?
Α	234.25
В	932.50
С	287.80
D	122.40
E	None of the above
Correct Answer	A
Marks	1

Δ

⁷ Question Description	Consider the following transactions with data items P and Q initialized to zero:
	T1: read (P);
	read (Q);
	if $P = 0$ then $Q := Q + 1$;
	write (Q);
	T2: read (Q);
	read (P);
	if $Q = 0$ then $P := P + 1$;
	write (P);
	Any non-serial interleaving of T1 and T2 for concurrent execution leads to
Α	A serializable schedule
В	A schedule that is not conflict serializable
С	A conflict serializable schedule
D	A schedule for which a precedence graph cannot be drawn
E	None of the above
Correct Answer	В
Marks	1

48	Question Description	In case of any shut down during transaction before commit which of the following statement is done automatically?
	A	View
	В	Commit
	С	Rollback
	D	Flashback
	E	None of the above
	Correct Answer	c
	Marks	1
19	Question Description	Which one of the following is NOT a valid identity?
	Α	$(x \oplus y) \oplus z = x \oplus (y \oplus z)$
	В	$(x + y) \oplus z = x \oplus (y + z)$
	С	$x \oplus y = x + y$, if $xy = 0$
	D	$x \oplus y = (xy + x'y')'$
	E	None of the above
	Correct Answer	В
	Marks	1

50	Question Description	Which one of the following is NOT desired in a good Software Requirement Specifications (SRS) document?
	A	Functional Requirements
	В	Non-Functional Requirements
	C	Goals of Implementation
	D	Algorithms for Software Implementation
	E	None of the above
	Correct Answer	D
	Marks	1

^{;1} Comprehension	The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it.
Question Description	 Read the following statements and arrange them in logical sequence (i) The bifurcation in command thus caused much inconvenience (ii) The control of navigation was handed over to the Master. (iii) Line of demarcation of authority, however, could not be precisely drawn. (iv) The captain treated the Master with highhanded contempt.
А	(ii)-(i)-(iv)-(iii)
В	(ii)-(iv)-(iii)-(i)
С	(ii)-(i)-(iii)-(iv)
D	(iv)-(iii)-(ii)-(i)
E	None of the above
Correct Answer	В
Marks	1

52	Comprehension	The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it.
	Question Description	Read the following statements and state whether they are true or false (i) The chief was as contemptuous of the Master to a degree comparable with his ignorance of his own job as a captain (ii) Aware of the risk of not obliging the powerful, the Master yielded too often but not without a struggle.
	A	(i) is true; (ii) is false
	В	(i) and (ii) are both false
	с	(i) and (ii) are both true
	D	(i) is false; (ii) is true
	E	None of the above
	Correct Answer	C
	Marks	1

53	Comprehension	The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it.
	Question Description	As per the passage, the handing over the direction of navigation to the Master meant
	Α	innumerable inconveniences
	В	partition of authority
	С	vague demarcation of authority
	D	line of demarcation
	E	None of the above
	Correct Answer	В
	Marks	1

54	Comprehension	The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it.
	Question Description	In the passage the phrase "line of demarcation", vis-à-vis the Captain and the Master, implies
	A	partition of authority
	В	boundary between the two
	C	conceptual separation of power
	D	delimiting the authority of each
	E	None of the above
	Correct Answer	D
	Marks	1

55	Comprehension	The direction of the navigation was therefore taken from the Captain and given to the Master; but this partition of authority produced innumerable inconveniences. The line of demarcation was not, and perhaps could not be, drawn with precision. There was therefore constant wrangling. The captain, confident in proportion to his ignorance, treated the Master with lordly contempt. The Master, well aware of the danger of disobliging the powerful, too often, after a struggle, yielded against his better judgement; and it was well if the loss of ship and crew was not the consequence. In general, the least mischievous of the aristocratical captains were those who completely abandoned to others the direction of the vessels, and thought only of making money and spending it.
	Question Description	Identify the obvious figures of speech in the following sentence: "The captain, confident in proportion to his ignorance, treated the Master with lordly contempt."
	Α	irony and sarcasm
	В	satire and hyperbole
	С	sarcasm and metaphor
	D	paradox and personification
	E	None of the above
	Correct Answer	A
	Marks	1

56	Question Description	When is the annual Indian Foreign Service (IFS) Day observed?
	Α	October 08
	В	October 09
	С	October 07
	D	October 06
	E	None of the above
	Correct Answer	B
	Marks	1
57	Question Description	Which of the following has been declared a National Monument very recently ?
	A	Mangarh Dham
	A B	Mangarh Dham Lascar War Memorial
	A B C	Mangarh Dham Lascar War Memorial Balidan Stambh
	А В С D	Mangarh Dham Lascar War Memorial Balidan Stambh Jharkhand War Memorial
	А В С О Е	Mangarh Dham Lascar War Memorial Balidan Stambh Jharkhand War Memorial None of the above
	A B C D E Correct Answer	Mangarh Dham Lascar War Memorial Balidan Stambh Jharkhand War Memorial None of the above A
	A B C D E Correct Answer Marks	Mangarh Dham Lascar War Memorial Balidan Stambh Jharkhand War Memorial None of the above A 1

58	Question Description	Which Solar-Powered Village become India's 1st Net-Zero Energy Community?
	Α	Baripatha
	В	Modhera
	С	Dharnai
	D	Kannauj
	E	None of the above
	Correct Answer	В
	Marks	1
59	Question Description	Which actor will be the first to film in space?
	A	Tom Cruise
	В	Val Kilmer
	С	Dwayne Johnson
	D	Johnny Depp
	E	None of the above
	Correct Answer	A
	Marks	1

60	Question Description	Scientists have found a new ecosystem 'The Trapping Zone' in which country?
	A	Thailand
	В	Japan
	с	Australia
	D	Maldives
	E	None of the above
	Correct Answer	D
	Marks	1
61	Question Description	President Draupadi Murmu has launched 'PARAM KAMRUPA' Supercomputer facility in which IIT?
	Α	IIT Guwahati
	В	IIT Bombay
	с	IIT Delhi
	D	IIT BHU
	E	None of the above
	Correct Answer	A
	Marks	1

62	Question Description	Which state has announced India's first 'Kadavur Slender Loris Sanctuary'?
	A	Himachal Pradesh
	В	Uttarakhand
	с	Madhya Pradesh
	D	Tamil Nadu
	E	None of the above
	Correct Answer	D
	Marks	1
63	Question Description	Which Indian city has won World Green City Award 2022?
	Α	Pune
	В	Hyderabad
	с	Indore
	D	Bhopal
	E	None of the above
	Correct Answer	B
	Marks	1

64	Question Description	Who has become the first Indian Wrestler to win Gold Medal at U-23 World Wrestling Championships?
	A	Aman Sehrawat
	В	Sajan Bhanwala
	С	Vikas
	D	Nitesh
	E	None of the above
	Correct Answer	A
	Marks	1
65	Question Description	World Statistics Day is being observed on which date?
	Α	October 22
	В	October 19
	С	October 20
	D	October 21
	E	None of the above
	Correct Answer	C
	Marks	1

⁶⁶ Question Description	Find the Missing Number?
	7, 9, 12, 48, ?, 890
Α	128
В	190
С	172
D	168
E	None of the above
Correct Answer	C
Marks	1

³⁷ Question Description	Which one will replace the question mark ? 4 3 15 31 4 7 31 7 31 7 81
A	45
В	41
с	32
D	40
E	None of the above
Correct Answer	A
Marks	1

68	Question Description	Which one will replace the question mark ? $5 \xrightarrow{6}_{492} \xrightarrow{8}_{9} \xrightarrow{7}_{572} \xrightarrow{5}_{4} \xrightarrow{4}_{7} \xrightarrow{3}_{7} \xrightarrow{5}_{572}$
	Α	115
	В	130
	c	135
	D	140
	E	None of the above
	Correct Answer	В
	Marks	1

⁹ Question Des	ription In each of whether th	the questions below consists of a question and two statements numbered I and II given below it. You have to decide e data provided in the statements are sufficient to answer the question.
	Is the aver-	age age of the students of a school less than 17 years?
	Statement	I: The strength of the class VIII is less than 25% of the strength of the school.
	Statement	II : The average age of the students of class VIII of the school is 18 years and that of the remaining classes is 16 years.
A	If the data question	in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the
В	If the data question	in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the
С	If the data	either in statement I alone or in statement II alone is sufficient to answer the question
D	If the data	in both statements I and II together are necessary to answer the question
E	None of th	e above
Correct Answ	er D	
Marks	1	

Question Description	If a mirror is placed on the line MN, which of the option figures shows the correct image of the given question figure?
A	A
В	В
С	C
D	D
E	None of the above
Correct Answer	С
Marks	1

1	Question Description	A train started from point A at a speed of 60 km/hr and after 2 hours another train of same length started from A at a speed of 80 km/hr in the same direction as the first one. After how much time the second train will meet the first train?
	Α	5 hours
	В	3 hours
	с	6 hours
	D	8 hours
	E	None of the above
	Correct Answer	C
	Marks	1

72	Question Description	If Karan says, "Rocky's mother is the only daughter of my mother", How is Karan related to Rocky?
	Α	Brother
	В	Father
	С	Uncle
	D	Grandfather
	E	None of the above
	Correct Answer	c
	Marks	1

3	Question Description	Pointing to a man, Rohan said, "His only brother is the father of my daughter's father." How is the Rohan related to the man?
	A	Father
	В	Grandson
	С	Uncle
	D	Nephew
	E	None of the above
	Correct Answer	D
	Marks	1

74	Question Description	Find the Missing Number? 47 58 71 79 95 ?
	A	108
	В	107
	С	105
	D	109
	E	None of the above
	Correct Answer	D
	Marks	1

75	Question Description	
		Which one will replace the question mark ?
		$A_2 C_4 E_6$
		G ₃ I ₅ ?
		M ₅ O ₉ Q ₁₄
	Α	L ₁₀
	В	K ₁₅
	С	I ₁₅
	D	K ₈
	E	None of the above
	Correct Answer	D
	Marks	1