QUESTION PAPER

Uchcha Madhyamic Computer Science [SHIFT - 1]

Exam Date: 12/09/2023 Time: 10:00 AM - 12:30 PM

Subject Name: Computer Science Subject Code: 226

Subject Question

Question 1 What is the simplified expression for the Boolean function $F(A, B, C, D) = \Sigma(0, 1, 2, 4, 5, 6, 8, 9, 10, 12, 13, 14)$ using the K-map me	Question Id : 1
Answer:	Option Id
(A) A'B'C'D' + A'B'C'D + A'BC'D + AB'C'D + ABCD	1001
(B) A'B'C'D' + A'BC'D + ABC'D + ABCD	1002
(C) A'B'C'D' + A'BC'D + ABC'D + ABCD	1003
(D) A'B'C'D' + A'BC'D' + A'BCD + ABCD	1004
Right Answer: A'B'C'D' + A'BC'D + AB'C'D + ABCD	Right Option Id : 1001
Question 2	Question Id : 55
In a PLA, what components are used to implement the combinational logic functions?	
Answer: (A) AND gates and OR gates	Option Id
	55001
(B) NAND gates and XOR gates	55002
(C) NOR gates and XNOR gates	55003
(D) NOT gates and multiplexers	55004
Right Answer:	Right Option Id : 55001
AND gates and OR gates	
Question 3 Which type of register is primarily used to temporarily hold data during arithmetic and logical operations in a microprocessor?	Question Id: 54
Answer:	Option Id
(A) Shift register	54001
(B) Parallel register	54002
(C) Accumulator register	54003
(D) Counter register	54004
Right Answer: Accumulator register	Right Option Id : 54003
Question 4	Question Id : 53
Which logic family uses both depletion and enhancement mode MOSFETs for its operation?	
Answer: (A) TTL	Option Id
(B) ECL	53001
	53002
(C) PMOS	53003
(D) CMOS	53004
Pight Answer:	Pight Ontion Id : 52004
Right Answer: CMOS	Right Option Id : 53004

Question 5 What is the primary difference between ROM and RAM?	Question Id: 52
Answer:	Option Id
(A) ROM is faster than RAM	52001
(B) ROM is volatile, while RAM is non-volatile	52002
(C) ROM is used for data storage, while RAM is used for program execution	52003
(D) ROM stores permanent data that cannot be changed, while RAM stores temporary data that can be read and written	52004
Right Answer: ROM stores permanent data that cannot be changed, while RAM stores temporary data that can be read and written	Right Option Id : 52004
Question 6 Given a Boolean function $F(A, B, C) = \Sigma(0, 1, 2, 3, 5)$, what is the expression in SOP form?	Question Id : 51
Answer : (A) A'B' + AB + AC	Option Id
(B) A + B + C	51001
	51002
(C) AB' + C'	51003
(D) A'B'C'	51004
Right Answer: A'B' + AB + AC	Right Option Id : 51001
Question 7 If the sum of two positive binary numbers is 11010 and there is a carry-out from the MSB, what should be done to obtain the cor	Question Id : 50 rect result?
Answer: (A) Discard the carry	Option Id
(B) Add the carry to the least significant bit (LSB)	50001
	50002
(C) Add the carry to the most significant bit (MSB)	50003
(D) Subtract the carry from the MSB	50004
Right Answer: Add the carry to the least significant bit (LSB)	Right Option Id : 50002
Question 8 In binary multiplication using the simple method, what is the first step after aligning the digits and preparing for multiplication?	
Answer : (A) Multiply the least significant bit (LSB) by the multiplier	Option Id
(B) Multiply the most significant bit (MSB) by the multiplier	49001
(C) Multiply the least significant bit (LSB) by the multiplicand	49002
	49003
(D) Multiply the most significant bit (MSB) by the multiplicand	49004
Right Answer: Multiply the least significant bit (LSB) by the multiplier	Right Option Id : 49001

Question 9 Question Id: 48

Answer:	Option Id	
(A) Closer parity bits provide higher error correction capability	48001	
(B) Closer parity bits provide lower error correction capability	48002	
(C) Distance between parity bits has no impact on error correction capability	48003	
(D) The position of parity bits is irrelevant in Hamming Code	48004	
Right Answer: Closer parity bits provide lower error correction capability	Right Option Id : 48002	
Question 10	Question ld : 47	
To convert a Gray Code to its binary equivalent, which technique is commonly used? Answer:	Option Id	
(A) Subtraction method	47001	
(B) Addition method	47002	
(C) Exclusive OR (XOR) operation	47003	
(D) Division method	47004	
Right Answer: Exclusive OR (XOR) operation	Right Option Id : 47003	
Question 11 Which component of an ideal microcomputer is responsible for temporarily holding data and instructions during processing?	Question Id : 46	
Answer: (A) CPU	Option Id	
	46001	
(B) ALU	46002	
(C) Memory	46003	
(D) Output devices	46004	
Right Answer: Memory	Right Option Id : 46003	
	Right Option Id : 46003 Question Id : 45	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer:	Question Id : 45 Option Id	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB)	Question Id: 45 Option Id 45001	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz)	Question Id : 45 Option Id	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz) (C) In bits	Question Id: 45 Option Id 45001	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz)	Question Id : 45 Option Id 45001 45002	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz) (C) In bits	Question Id : 45 Option Id 45001 45002 45003	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz) (C) In bits (D) In address lines Right Answer: In bits Question 13 Microcontrollers find application in various fields. What is a typical application of microcontrollers in the automotive industry?	Question Id : 45 Option Id 45001 45002 45003 45004 Right Option Id : 45003	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz) (C) In bits (D) In address lines Right Answer: In bits	Question Id : 45 Option Id 45001 45002 45003 45004 Right Option Id : 45003 Question Id : 44 Option Id	
Question 12 How is the width of the data bus typically measured in a microcomputer system? Answer: (A) In kilobytes (KB) (B) In megahertz (MHz) (C) In bits (D) In address lines Right Answer: In bits Question 13 Microcontrollers find application in various fields. What is a typical application of microcontrollers in the automotive industry? Answer:	Question Id : 45 Option Id 45001 45002 45003 45004 Right Option Id : 45003	

	44003
(D) Weather forecasting systems	44004
Right Answer: Engine control in cars	Right Option Id : 44003
Question 14	Question Id: 43
Which data structure often results in a time-space tradeoff by using extra memory to speed up operations? Answer:	Option Id
(A) Arrays	43001
(B) Linked lists	43002
(C) Hash tables	43003
(D) Stacks	43004
Right Answer: Hash tables	Right Option Id : 43003
Question 15 Which term refers to the strategy of optimizing an algorithm's use of resources, often by making sacrifices in one aspect to Answer:	Question Id : 42 for improvements in another? Option Id
(A) Greedy algorithm	42001
(B) Divide and conquer	42002
(C) Dynamic programming	42003
(D) Tradeoff	
	42004
Right Answer: Tradeoff	## 42004 Right Option Id : 42004
	Right Option Id : 42004 Question Id : 41
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This	Right Option Id : 42004 Question Id : 41 is particularly useful when:
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer:	Question Id: 41 is particularly useful when: Option Id
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity	Question Id: 41 sis particularly useful when: Option Id 41001
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed	Question Id: 41 sis particularly useful when: Option Id 41001 41002
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random	Question Id: 41 sis particularly useful when: Option Id 41001 41002 41003
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics	Question Id: 41 Sis particularly useful when: Option Id 41001 41002 41003 41004
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics Right Answer: Algorithm behavior varies based on certain input characteristics	Question Id: 41 Sis particularly useful when: Option Id 41001 41002 41003 41004 Right Option Id: 41004
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics Right Answer: Algorithm behavior varies based on certain input characteristics Question 17 If an algorithm's behavior is bounded by "o(f(n)) if g(n)", what notation does it become when the condition is removed? Answer: (A) o(f(n))	Question Id: 41 Sis particularly useful when: Option Id 41001 41002 41003 41004 Right Option Id: 41004 Question Id: 456
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics Right Answer: Algorithm behavior varies based on certain input characteristics	Question Id: 41 Question Id: 41 is particularly useful when: Option Id 41001 41002 41003 41004 Right Option Id: 41004 Question Id: 56 Option Id
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics Right Answer: Algorithm behavior varies based on certain input characteristics Question 17 If an algorithm's behavior is bounded by "o(f(n)) if g(n)", what notation does it become when the condition is removed? Answer: (A) o(f(n))	Question Id: 41 Sis particularly useful when: Option Id 41001 41002 41003 41004 Right Option Id: 41004 Question Id: 56 Option Id 56001
Question 16 Conditional asymptotic notation allows for a more nuanced analysis of algorithm behavior under specific conditions. This Answer: (A) Analyzing algorithms with constant time complexity (B) The input size is fixed (C) The input data is random (D) Algorithm behavior varies based on certain input characteristics Right Answer: Algorithm behavior varies based on certain input characteristics Question 17 If an algorithm's behavior is bounded by "o(f(n)) if g(n)", what notation does it become when the condition is removed? Answer: (A) o(f(n)) (B) o(g(n))	Question Id: 41 Sis particularly useful when: Option Id 41001 41002 41003 41004 Right Option Id: 41004 Question Id: 56 Option Id 56001 56002

o(f(n))

Question 18	Question Id: 57
The recurrence equation $T(n) = T(n/2) + 1$ represents the time complexity of which algorithmic paradigm? Answer:	Option Id
(A) Divide and Conquer	57001
(B) Greedy Algorithms	57002
(C) Dynamic Programming	57003
(D) Brute Force	57004
Right Answer: Divide and Conquer	Right Option ld : 57001
Question 19 Divide and Conquer is an algorithmic paradigm that solves problems by:	Question Id: 58
Answer:	Option Id
(A) Iteratively solving subproblems	58001
(B) Recursively solving subproblems	58002
(C) Using heuristics to find solutions	58003
(D) Greedily combining solutions	58004
Right Answer: Recursively solving subproblems	Right Option Id : 58002
Question 20 A threaded binary tree is a binary tree in which:	Question Id: 67
A threaded binary tree is a binary tree in which: Answer:	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children	
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children	Option Id 67001
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child	Option Id 67001 67002
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent	Option Id 67001 67002 67003
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor	Option Id 67001 67002 67003 67004
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor Right Answer: Each node has a thread connecting it to its predecessor or successor	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor Right Answer: Each node has a thread connecting it to its predecessor or successor Question 21 Which traversal algorithm is typically implemented using a stack data structure? Answer: (A) DFS	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor Right Answer: Each node has a thread connecting it to its predecessor or successor Question 21 Which traversal algorithm is typically implemented using a stack data structure? Answer: (A) DFS (B) BFS	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor Right Answer: Each node has a thread connecting it to its predecessor or successor Question 21 Which traversal algorithm is typically implemented using a stack data structure? Answer: (A) DFS	Option Id
A threaded binary tree is a binary tree in which: Answer: (A) Each node has two children (B) Each node has at most one child (C) Each node is connected to its parent (D) Each node has a thread connecting it to its predecessor or successor Right Answer: Each node has a thread connecting it to its predecessor or successor Question 21 Which traversal algorithm is typically implemented using a stack data structure? Answer: (A) DFS (B) BFS	Option Id

Question 22 Question Id: 72

In a directed graph, an edge that points from vertex A to vertex B is denoted as:

Answer:

(A) (A, B)	72001
(B) [A, B]	72002
(C) <a, b=""></a,>	72003
(D) {A, B}	72004
Right Answer : (A, B)	Right Option Id : 72001
Question 23	Question Id : 71
Separate chaining involves storing collided elements in separate data structures, typically in: Answer:	Option Id
(A) Linked lists	71001
(B) Arrays	
(C) Stacks	71002
(D) Queues	71003
(D) Quedes	71004
Right Answer:	Right Option Id : 71001
Linked lists	
Question 24 Which collicion recolution technique involves placing collided elements in the part available empty elet in the bach table?	Question Id: 70
Which collision resolution technique involves placing collided elements in the next available empty slot in the hash table? Answer:	Option Id
(A) Linear probing	70001
(B) Quadratic probing	70002
(C) Separate chaining	70003
(D) Double hashing	70004
Right Answer: Linear probing	Right Option Id : 70001
Question 25	Question Id: 69
In the Tower of Hanoi problem with "n" disks, how many moves are required to solve the problem?	
Answer: (A) n	Option Id 69001
(B) 2n	
(C) 2^n - 1	69002
(D) 2^n	69003
(D) 2 II	69004
Right Answer:	Right Option Id: 69003
2^n - 1	
Question 26 The process of removing recursion involves replacing recursive function calls with:	Question Id: 68
The process of removing recursion involves replacing recursive function calls with: Answer:	Option Id
(A) More recursive function calls	68001
(B) Loops	68002
(C) Additional memory allocation	68003

(D) Non-recursive function calls	68004	
Right Answer: Loops	Right Option Id : 68002	
Question 27	Question Id: 66	
A formal model of protection in an operating system provides: Answer:	Option Id	
(A) A mathematical framework for analyzing resource allocation	66001	
(B) Guidelines for designing user interfaces	66002	
(C) Methods for optimizing memory management	66003	
(D) Techniques for improving CPU utilization	66004	
Right Answer: A mathematical framework for analyzing resource allocation	Right Option Id : 66001	
Question 28	Question ld : 59	
In an operating system, a "buffer cache" is used to: Answer :	Option Id	
(A) Store files in memory	59001	
(B) Store copies of frequently used files in memory	59002	
(C) Store the operating system kernel	59003	
(D) Store input/output devices	59004	
Right Answer: Store copies of frequently used files in memory	Right Option Id : 59002	
Store copies of frequently used files in memory Question 29	Right Option Id : 59002 Question Id : 65	
Store copies of frequently used files in memory		
Store copies of frequently used files in memory Question 29 File manipulation operations in an operating system include:	Question Id : 65	
Store copies of frequently used files in memory Question 29 File manipulation operations in an operating system include: Answer:	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files	Question Id: 65 Option Id 65001	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes	Question Id : 65 Option Id 65001 65002	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers	Question Id : 65 Option Id 65001 65002 65003	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content Question 30 The I/O subsystem in an operating system is responsible for: Answer:	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content Question 30 The I/O subsystem in an operating system is responsible for: Answer: (A) Allocating memory for processes	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content Question 30 The I/O subsystem in an operating system is responsible for: Answer:	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content Question 30 The I/O subsystem in an operating system is responsible for: Answer: (A) Allocating memory for processes	Question Id : 65 Option Id	
Question 29 File manipulation operations in an operating system include: Answer: (A) Allocating memory to files (B) Assigning file names to processes (C) Loading files into CPU registers (D) Reading, writing, and modifying file content Right Answer: Reading, writing, and modifying file content Question 30 The I/O subsystem in an operating system is responsible for: Answer: (A) Allocating memory for processes (B) Managing the file system	Question Id : 65 Option Id	

devices

Question 31	Question Id: 63	
The primary goal of load control is to: Answer:	Option Id	
(A) Prevent processes from running concurrently	63001	
(B) Avoid context switching between processes	63002	
(C) Ensure that CPU time is evenly distributed among processes	63003	
(D) Maximize the usage of virtual memory	63004	
Right Answer: Ensure that CPU time is evenly distributed among processes	Right Option Id: 63003	
Question 32 The purpose of a page table in a paging system is to:	Question Id: 62	
Answer:	Option Id	
(A) Store pages of memory	62001	
(B) Manage input/output operations	62002	
(C) Translate virtual addresses to physical addresses	62003	
(D) Store program instructions	62004	
Right Answer : Translate virtual addresses to physical addresses	Right Option Id : 62003	
Ouestion 33	Ouestion Id : 61	
Question 33 In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to:	Question Id : 61	
	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation	Option Id 61001	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion	Option Id 61001	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock	Option Id 61001 61002	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion	Option Id 61001 61002 61003 61004	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation	Option Id 61001 61002 61003	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer:	Option Id 61001 61002 61003 61004	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer:	Option Id 61001 61002 61003 61004	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer:	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS?	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer:	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer: (A) DBMS is a collection of queries	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer: (A) DBMS is a collection of queries (B)) DBMS is a high-level language	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer: (A) DBMS is a collection of queries (B)) DBMS is a high-level language (C) DBMS is a programming language (D) DBMS stores, modifies and retrieves data	Option Id	
In multiprogramming with fixed partitions, if a process requires more memory than is available in a partition, it may lead to: Answer: (A) Fragmentation (B) Deadlock (C) Priority inversion (D) Starvation Right Answer: Fragmentation Question 34 What is DBMS? Answer: (A) DBMS is a collection of queries (B)) DBMS is a high-level language (C) DBMS is a programming language	Option Id	

Question 35Which of the following is correct according to the technology deployed by DBMS?

Answer:	Option Id
(A) Pointers are used to maintain transactional integrity and consistency	40001
(B) Cursors are used to maintain transactional integrity and consistency	40002
(C) Locks are used to maintain transactional integrity and consistency	40003
(D) Triggers are used to maintain transactional integrity and consistency	40004
Right Answer: Locks are used to maintain transactional integrity and consistency	Right Option Id : 40003
Question 36	Question Id : 39
The term "NTFS" refers to which one of the following? Answer:	Option Id
(A) New Technology File System	39001
(B) New Tree File System	39002
(C) New Table type File System	39003
(D) Both A and C	39004
Right Answer: New Technology File System	Right Option Id : 39001
Question 37 Which of the following is a top-down approach in which the entity's higher level can be divided into two lower sub-entities?	Question Id : 38
Answer: (A) Aggregation	Option Id
(B) Generalization	38001
	38002
(C) Specialization	38003
(D) All of the above	38004
Right Answer: Specialization	Right Option Id : 38003
Question 38 The term "DFD" stands for?	Question Id : 37
Answer : (A) Data file diagram	Option Id
(B) Data flow document	37001
(C) Data flow diagram	37002
(D) None of the above	37003
(D) Notice of the above	37004
Right Answer: Data flow diagram	Right Option Id : 37003
Question 39 The term "FAT" is stands for	Question Id : 17
Answer: (A) File Allocation Tree	Option Id
(B) File Allocation Table	17001
(C) File Allocation Graph	17002
(c) the Anocation Graph	17003

(D) All of the above	17004
Right Answer: File Allocation Table	Right Option Id : 17002
Question 40	Question ld : 16
The term "Data" refers to: Answer :	Option Id
(A) The electronic representation of the information(or data)	16001
(B) Basic information	16002
(C) Row Facts and figures	16003
(D) Both A and C	16004
Right Answer: Row Facts and figures	Right Option Id : 16003
Question 41 What is the primary function of routing in the network layer?	Question ld : 15
Answer:	Option Id
(A) Data framing	15001
(B) Error correction	15002
(C) Finding the best path for data	15003
(D) Flow control	15004
Right Answer: Finding the best path for data	Right Option Id : 15003
Finding the best path for data Question 42	Right Option Id : 15003 Question Id : 14
Finding the best path for data	
Question 42 What is a socket in the context of process-to-process communication?	Question ld : 14
Question 42 What is a socket in the context of process-to-process communication? Answer:	Question Id : 14 Option Id
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission	Question Id : 14 Option Id 14001
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication	Question Id : 14 Option Id 14001 14002
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission	Question Id : 14 Option Id 14001 14002 14003
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication	Question Id : 14 Option Id 14001 14002 14003 14004
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication	Question Id : 14 Option Id 14001 14002 14003 14004 Right Option Id : 14002
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication	Question Id : 14 Option Id 14001 14002 14003 14004 Right Option Id : 14002
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication	Question Id : 14 Option Id 14001 14002 14003 14004 Right Option Id : 14002 Question Id : 13 Option Id
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication Question 43 Data transmission using multiple pathways simultaneously is known as: Answer: (A) Parallel Transmission	Question Id : 14 Option Id 14001 14002 14003 14004 Right Option Id : 14002 Question Id : 13 Option Id 13001
Question 42 What is a socket in the context of process-to-process communication? Answer: (A) A hardware device for data transmission (B) A software interface for network communication (C) A type of cable used for high-speed data transmission (D) type of network topology Right Answer: A software interface for network communication Question 43 Data transmission using multiple pathways simultaneously is known as: Answer: (A) Parallel Transmission (B) Serial Transmission	Question Id : 14 Option Id 14001 14002 14003 14004 Right Option Id : 14002 Question Id : 13 Option Id 13001 13002

Question 44	Question Id: 12
Which of the following is NOT a network topology? Answer:	Option Id
(A) Star	12001
(B) Ring	12002
(C) Disk	12003
(D) Mesh	12004
Right Answer : Disk	Right Option Id : 12003
Question 45	Question Id : 11
Contention-based MAC protocols are commonly used in: Answer:	Option Id
(A) Ethernet networks	11001
(B) Token Ring networks	11002
(C) ATM networks	11003
(D) Point-to-Point networks	11004
Right Answer: Ethernet networks	Right Option ld : 11001
Question 46	Question Id: 10
Routing involves: Answer:	Option Id
(A) Dividing data into frames	10001
(B) Managing flow control	10002
(C) Determining the best path for data packets	10003
(D) Correcting errors in data transmission	10004
Right Answer: Determining the best path for data packets	Right Option Id : 10003
Question 47 What is the purpose of ARR (Address Resolution Protess)?	Question Id : 9
What is the purpose of ARP (Address Resolution Protocol)? Answer:	Option Id
(A) To assign IP addresses to devices	9001
(B) To resolve domain names to IP addresses	9002
(C) To map MAC addresses to IP addresses	9003
(D) To manage network congestion	9004
Right Answer: To map MAC addresses to IP addresses	Right Option Id : 9003
Question 48	Question Id: 8

Question 48
Which software life cycle model allows for iterative development and incorporates risk analysis?

Answer:

(A) Waterfall model	8001
(B) Prototype model	8002
(C) Spiral model	8003
(D) Agile model	8004
Right Answer : Spiral model	Right Option Id : 8003
Question 49 What is the main goal of software quality assurance?	Question Id: 7
Answer:	Option Id
(A) To eliminate all defects from the software	7001
(B) To ensure the software is defect-free before release	7002
(C) To establish and enforce standards and processes to improve software quality	7003
(D) To test software under different conditions	7004
Right Answer: To establish and enforce standards and processes to improve software quality	Right Option Id : 7003
Question 50 Reverse engineering is primarily used for:	Question ld : 6
Answer:	Option Id
(A) Creating new software from scratch	6001
(B) Improving software performance	6002
(C) Understanding and documenting existing software	6003
(D) Testing software components	6004
Right Answer: Understanding and documenting existing software	Right Option Id : 6003
Question 51 Which testing approach involves testing individual components or units of code?	Question Id : 5
Answer:	Option Id
(A) Integration Testing	5001
(B) System Testing	5002
(C) Unit Testing	5003
(D) Acceptance Testing	5004
Right Answer: Unit Testing	Right Option Id : 5003
Question 52 What is the main goal of System Testing?	Question Id: 4
Answer: (A) Testing individual components in isolation	Option Id
(B) Testing the integration between different software components	4001
	4002
(C) Testing software functionality from the user's perspective	4003

(D) Identifying defects in the source code	4004
Right Answer: Testing software functionality from the user's perspective	Right Option Id : 4003
Question 53	Question Id: 3
Which metric is used for estimating the size of a software project? Answer:	Option Id
(A) Cyclomatic Complexity	3001
(B) Function Points (FP)	3002
(C) Defect Density	3003
(D) Software Reliability Index	3004
Right Answer: Function Points (FP)	Right Option Id : 3002
Question 54 What is the purpose of staffing level estimation in software project management?	Question ld : 18
Answer:	Option Id
(A) To determine the number of hardware components required	18001
(B) To identify potential risks in the project	18002
(C) To allocate appropriate resources to the project	18003
(D) To estimate the maintenance costs of the software	18004
Right Answer: To identify potential risks in the project	Right Option Id : 18002
Right Answer:	
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer:	Right Option Id : 18002 Question Id : 2 Option Id
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc	Right Option Id : 18002 Question Id : 2
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new	Right Option Id : 18002 Question Id : 2 Option Id
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create	Right Option Id : 18002 Question Id : 2 Option Id 2001
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new	Right Option Id : 18002 Question Id : 2 Option Id 2001 2002
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create	Right Option Id : 18002 Question Id : 2 Option Id 2001 2002 2003
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new	Right Option Id : 18002 Question Id : 2 Option Id 2001 2002 2003 2004
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new Question 56 What is an abstract class in OOP? Answer:	Question Id : 2 Option Id 2001 2002 2003 2004 Right Option Id : 2002
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new Question 56 What is an abstract class in OOP?	Question Id : 18002 Question Id : 2 Option Id 2001 2002 2003 2004 Right Option Id : 2002 Question Id : 2002
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new Question 56 What is an abstract class in OOP? Answer:	Question Id: 2 Option Id 2001 2002 2003 2004 Right Option Id: 2002 Question Id: 19 Option Id
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new Question 56 What is an abstract class in OOP? Answer: (A) A class with no methods	Question Id : 18002 Question Id : 2 Option Id 2001 2002 2003 2004 Right Option Id : 2002 Question Id : 19 Option Id 19001
Right Answer: To identify potential risks in the project Question 55 Which keyword is used to create an instance of a class in most programming languages? Answer: (A) alloc (B) new (C) create (D) instance Right Answer: new Question 56 What is an abstract class in OOP? Answer: (A) A class with no methods (B) A class that cannot be instantiated	Question Id : 18002 Question Id : 2 Option Id 2001 2002 2003 2004 Right Option Id : 2002 Question Id : 19 Option Id 19001 19002

A class that cannot be instantiated

Question 57	Question Id: 21
What is the purpose of the "super" keyword in Java and other similar languages? Answer:	Option Id
(A) It refers to the superclass in inheritance	21001
(B) It creates a new object instance	21002
(C) It defines a new class	21003
(D) It handles exceptions	21004
Right Answer: It refers to the superclass in inheritance	Right Option Id : 21001
Question 58	Question Id: 36
Which of the following best defines a class? Answer:	Option Id
(A) An instance of an object	36001
(B) A blueprint for creating objects	36002
(C) A variable holding data	36003
(D) A function with a return value	36004
Right Answer: A blueprint for creating objects	Right Option Id : 36002
Question 59	Question Id : 35
Which principle ensures that only essential information is visible to the outside world? Answer:	Option Id
(A) Polymorphism	35001
(B) Information hiding	35002
(C) Encapsulation	35003
(D) Abstraction	35004
Right Answer: Information hiding	Right Option Id : 35002
Question 60	Question Id: 34
What is the main purpose of inheritance in OOP? Answer:	Option Id
(A) To create instances of classes	34001
(B) To prevent data abstraction	34002
(C) To establish a parent-child relationship between classes	34003
(D) To define exceptions	34004
Right Answer: To establish a parent-child relationship between classes	Right Option Id : 34003
Question 61	Question Id : 33

What are abstract methods?
Answer:

(A) Methods that are inaccessible to the outside world	33001
(B) Methods that have implementation details	33002
(C) Methods without a body, defined in an abstract class	33003
(D) Methods that cannot be inherited	33004
Right Answer: Methods without a body, defined in an abstract class	Right Option Id : 33003
Question 62	Question Id: 32
Which protocol is commonly used for sending emails? Answer:	Option Id
(A) .HTTPS	32001
(B) FTP	32002
(C) SMTP	32003
(D) TCP	32004
Right Answer: SMTP	Right Option Id : 32003
Question 63	Question Id : 31
What does CSS stand for? Answer:	Option Id
(A) Cascading Style System	31001
(B) Creative Styling Script	31002
(C) Computer Style Sheets	31003
(D) Cascading Style Sheets	31004
	31004
Right Answer: Cascading Style Sheets	Right Option Id: 31004
Question 64	Question Id : 30
Which library simplifies JavaScript tasks like HTML document traversal and manipulation?	
Answer: (A) JavaFX	Option Id
(B) Bootstrap	30001
	30002
(C) React	30003
(D) jQuery	30004
Right Answer:	Right Option Id : 30004
jQuery	
Question 65 What does AJAX stand for?	Question Id: 29
Answer:	Option Id
(A) Asynchronous JavaScript and XML	29001
(B) Automated JavaScript and XHTML	29002
(C) Advanced JavaScript and XML	29003

(D) Asynchronous JSON and XHTML	29004
Right Answer: Asynchronous JavaScript and XML	Right Option Id : 29001
Question 66 How does the DOM tree structure reflect the hierarchy of HTML elements? Answer:	Question Id : 28
(A) In alphabetical order	Option Id 28001
(B) Based on the element's size	28002
(C) In a parent-child relationship	28003
(D) According to the element's color	28004
Right Answer: In a parent-child relationship	Right Option Id : 28003
Question 67	Question Id : 27
In XML, which attribute is used to uniquely identify an element? Answer:	Option Id
(A) id	27001
(B) class	27002
(C) name	27003
(D) tag	27004
Right Answer:	Right Option Id : 27001
id	
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number	
Question 68	option Id
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer:	Option Id 26001
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101	Option Id 26001 26002
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100	Option Id 26001 26002 26003
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001101	Option Id 26001 26002
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001101 (D) ε, 0011, 11001100 Right Answer: ε, 0011, 11001100 Question 69 A Language for which DFA exist is a	Option Id
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001100 Right Answer: ε, 0011, 11001100	Option Id
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001100 Right Answer: ε, 0011, 11001100 Question 69 A Language for which DFA exist is a Answer:	Option Id
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001101 (D) ε, 0011, 11001100 Right Answer: ε, 0011, 11001100 Question 69 A Language for which DFA exist is a Answer: (A) Regular Language	Option Id
Question 68 The Kleene Star operation accepts the following string of finite length over set A = {0,1} where string s contains even number Answer: (A) 01, 0011,010101 (B) 0011, 11001100 (C) ε, 0011, 11001101 (D) ε, 0011, 11001100 Right Answer: ε, 0011, 11001100 Question 69 A Language for which DFA exist is a Answer: (A) Regular Language (B) Non-Regular Language	Option Id

Question 70	Question Id : 24
Let $u='1101'$, $v='0001'$, then $uv=11010001$ and $vu=00011101$. Using the given information what is the identity element for the st Answer:	tring? Option Id
(A) u-1	24001
(B) v-1	24002
(C) u-1v-1	24003
(D) ε	24004
Right Answer:	Right Option Id : 24004
ε	
Question 71 For a DFA accepting binary numbers whose decimal equivalent is divisible by 3, what are all the possible remainders?	Question Id : 23
Answer:	Option Id
(A) 0	23001
(B) 0,2	23002
(C) 0,1,2	23003
(D) 0,1,2,3	23004
Right Answer: 0,1,2	Right Option Id : 23003
Question 72 Minimum Number of states require to accept string ends with 101.	Question Id : 22
Answer:	Option Id
(A) 3	22001
(B) 2	22002
(C) 1	22003
(D) can't be represented	22004
Right Answer: 2	Right Option Id : 22002
Question 73 If NFA of 5 states excluding the initial state is converted into DFA, maximum possible number of states for the DFA is?	Question Id : 74
Answer:	Option Id
(A) 64	74001
(B) 32	74002
(C) 128	74003
(D) 187	74004
Right Answer: 64	Right Option Id : 74001
Question 74	Question Id : 20

(A) Concatenation

Answer:

The class of CFG is not closed under

	20001
(B) Intersection	20002
(C) Union	20003
(D) Repeated Concatenation.	20004
Repeated Concatenation.	Right Option Id : 20004
Question 75 Which among the following is not true about IoT?	Question Id : 75
Answer: (A) IoT uses Micro Controllers	Option Id
(B) IoT is fully safe	75001
	75002
(C) IoT uses Sensors and Actuators	75003
(D) IoT uses wireless technology	75004
Right Answer: IoT is fully safe	Right Option Id : 75002
Question 76 About leT which among the followings is not correct?	Question Id : 78
About IoT, which among the followings isnot correct? Answer:	Option Id
(A) Light sensor is analog	78001
(B) microphone is a digital sensor	78002
(C) Keyboard is a digital sensor	78003
(D) Push button is a digital Sensor	78004
Right Answer: microphone is a digital sensor	Right Option Id : 78002
Question 77 BLE stands for	Question Id : 92
Answer:	Option Id
(A) Bluetooth large energy	92001
(B) Bluetooth low energy	92002
(C) Bluetooth light energy	92003
(D) Bluetooth long energy	92004
Right Answer: Bluetooth low energy	Right Option Id : 92002
Question 78 WSN stands for? Answer:	Question Id : 93 Option Id
(A) Wireless Standard Protocol	93001
(B) Wireless Sensor Protocol	93002
(C) Wireless Serial Protocol	93003
	() 33003

Wireless Sensor Protocol	
Question 79	Question Id : 94
A complex SCADA system haslevels? Answer :	Option Id
(A) 6	94001
(B) 5	94002
(C) 3	94003
(D) 4	94004
Right Answer :	Right Option Id : 94004
Question 80 /hat is the role of the MISO pin in the RFID Module?	Question Id : 97
answer:	Option Id
A) Master In Slave Out	97001
) Manage Internal Slave Output	97002
C) Master Internal Search Optimization	97003
) Manage Input Slave Op	97004
ght Answer : aster In Slave Out	Right Option Id : 97001
uestion 81 /ho is known as the father of AI?	Question Id : 96
nswer:	Option Id
Fisher Ada	96001
) Alan Turing	96002
) John McCarthy	96003
) Allen Newell	96004
ight Answer : ohn McCarthy	Right Option Id : 96003
Question 82 rogramming language commonly used for AI is?	Question Id : 91
nswer:	Option Id
Lisp	91001
Perl	91002
) Prolog	91003
0) C++	91004
ight Answer : erl	Right Option Id : 91002

Right Answer:

Right Option Id: 93002

Question 83	Question Id: 98
The algorithm used in the Game tree to make decisions of Win/Lose is? Answer:	Option Id
(A) Heuristic Search Algorithm	98001
(B) DFS/ BFL algorithm	98002
(C) Greedy Search algorithm	98003
(D) Min/Max algorithm	98004
Right Answer: Min/Max algorithm	Right Option Id : 98004
Question 84	Question Id: 99
Uniform-cost search expands the node n with the Answer :	Option Id
(A) Lowest path cost	99001
(B) Heuristic cost	99002
(C) Highest path cost	99003
(D) Average path cost	99004
Right Answer: Lowest path cost	Right Option Id : 99001
Question 85	Question Id: 100
The process of removing detail from a given state representation is called Answer:	Option Id
(A) Extraction	100001
(B) Abstraction	100002
(C) Data Mining	100003
(D) Information Retrieval	100004
	100004
Right Answer: Abstraction	Right Option Id: 100002
Question 86	Question Id: 95
What does a first order predicate logic contain? Answer:	Option Id
(A) Predicate and a subject	95001
(B) Predicate and a Preposition	95002
(C) Subject and an object	
(D) None of the above	95003
	95004
Right Answer:	Right Option Id : 95001
Predicate and a subject	
Question 87	Overtion Id. 00
Question 87 Which of the following can improve the performance of AI agent?	Question Id: 90
Answer:	Option Id

90001

(A) Precision

(B) Learning	90002
(C) Observing	90003
(D) All of the above	90004
Right Answer: Learning	Right Option Id : 90002
Question 88	Question Id : 77
Which of the following is part of the four main types for e-commerce? Answer:	Option Id
(A) B2B	77001
(B) B2C	77002
(C) C2B	77003
(D) All of the above	77004
Right Answer: All of the above	Right Option Id : 77004
Question 89 What is the process in which a buyer posts its interest in buying a certain quantity of items, and sellers compete for the bu lower bids until there is only one seller left?	Question Id : 88 siness by submitting successively
Answer:	Option Id
(A) B2B Marketplace	88001
(B) Auction	88002
(C) Reverse Auction	88003
(D) Intranet	88004
Right Answer: Reverse Auction	Right Option Id : 88003
Question 90 If it is easy for competitors to enter the market, the threat of new entrants is considered:	Question Id: 87
Answer:	Option Id
(A) Low	87001
(B) High	87002
(C) Moderate	87003
(D) Negligible	87004
Right Answer: High	Right Option Id : 87002
Question 91	Question Id: 89
Which of the following refers to creating products tailored to individual customers? Answer:	Option Id
(A) Customization	89001
(B) Adaptation	89002
(C) Direct material	89003
(D) Auction	

89004	
ld : 89001	

Right Answer:	Right Option Id: 89001
Customization	
Question 92 Which form of e-marketplace brings together buyers and sellers from the same industry?	Question Id: 86
Answer:	Option Id
(A) Horizontal	86001
(B) Vertical	86002
(C) integrated	86003
(D) isolated	86004
Right Answer : Vertical	Right Option Id: 86002
Vol. deal	
Question 93 Which of the following is done by Secure Sockets Layers?	Question Id: 85
Answer:	Option Id
(A) creates a secure, private connection to a web server	85001
(B) Encrypts information	85002
(C) Sends information over the internet	85003
(D) All of the above	85004
Right Answer: All of the above	Right Option Id: 85004
All of the above	
Question 94 The delay that occur during the playback of a stream is called	Question Id: 84
Answer:	Option Id
(A) Stream delay	84001
(B) Playback delay	84002
(C) Jitter	84003
(D) Event delay	84004
Right Answer: Jitter	Right Option Id: 84003
ritter	
Question 95 In teardown state of real time streaming protocol is	Question Id: 76
Answer:	Option Id
(A) the server resources for client	76001
(B) server delivers the stream to client	76002
(C) server suspends delivery of stream	76003
(D) server breaks down the connection	76004
Right Answer: server breaks down the connection	Right Option Id: 76004
Server breaks down the connection	

Question 96	Question Id: 83
In Real Time Interactive Audio Video, Jitter is introduced in real-time data by delay between Answer:	Option Id
(A) pixels	83001
(B) layers	83002
(C) frames	83003
(D) packets	83004
Right Answer :	Right Option Id: 83004
packets	ingine opinon in vocco i
Question 97 In Audio and Video Compression, voice is sampled at 8000 samples per second with	Question Id: 82
Answer:	Option Id
(A) 8 bits per sample	82001
(B) 5 bits per sample	82002
(C) 7 bits per sample	82003
(D) 6 bits per sample	82004
Right Answer: 8 bits per sample	Right Option Id : 82001
Question 98	Question Id: 81
Audio compression can be used for Answer:	Option Id
(A) voice and data	81001
(B) video and voice	81002
(C) speech or music	81003
(D) picture and colors	
	81004
Right Answer:	Right Option Id: 81003
speech or music	
Question 99 Each represents a particular colour.	Question Id: 80
Answer: (A) Frame	Option Id
	80001
(B) Character	80002
(C) Pixel value	80003
(D) None of the above	80004
Right Answer:	Right Option Id: 80003
Pixel value	
Question 100 is basically a form of pictorial presentation.	Question Id: 79
Answer:	Option Id
(A) Photography	79001

(B) Animations	
	79002
(C) Drawing	79003
(D) Creativity	79004
Right Answer: Animations	Right Option Id : 79002
Art Of Teach	ing
Question 101	Question Id: 120
The main aim of classroom teaching is Answer:	Option Id
(A) to give information	120001
(B) help to pass examination	120002
(C) syllabus coverage	120003
(D) to develop personality	120004
Right Answer: to develop personality	Right Option Id : 120004
Question 102	Question Id : 121
To ensure participation of students we use Answer:	Option Id
(A) demonstration	121001
(B) little man's lecture	121002
(C) discussion	121003
(D) illustration	121004
Right Answer: discussion	Right Option Id : 121003
Question 103	Question Id: 125
learning through independent effort is Answer:	Option Id
(A) autonomous learning	125001
(B) autocratic learning	125002
(C) democratic learning	125003
(D) all the above	125004
Right Answer: autonomous learning	Right Option Id : 125001
Question 104	Question Id: 123
Answer:	Option Id
(A) may include abstract concepts	123001
(B) difficult to measure	400000
(b) difficult to fileusure	123002

(D) All the above	123004
Right Answer: All the above	Right Option Id : 123004
Question 105 psychomotor domain relates to	Question Id : 124
Answer : (A) map making	Option Id 124001
(B) project making	124002
(C) playing	124003
(D) all the above	124004
Right Answer: all the above	Right Option Id : 124004
Question 106 Heuristic means	Question Id: 119
Answer: (A) to invertigate	Option Id 119001
(B) to show	119001
(C) to do	119002
(D) to act	119004
Right Answer :	Right Option Id : 119001
to invertigate	
Question 107 Armstrong gifted teaching with	Question Id: 117
Answer: (A) Project method	Option Id
(B) heuristic method	117001
(C) team teaching	117002
(D) blended method	117004
Right Answer :	117004 Right Option Id : 117002
heuristic method	
Question 108 Set induction relates to	Question Id : 126
Answer:	Option Id
(A) previous knowledge	126001
(B) new knowledge	126002
(C) specific objectives (D) statement of aim	126003
(D) statement of aim	126004
Right Answer: previous knowledge	Right Option Id : 126001

Question 109	Question Id: 127
Diadactic teaching materials was introduced by Answer:	Option Id
(A) Pestalozzi	127001
(B) froebel	127002
(C) Montessori	127003
(D) Dewey	
	127004
Right Answer:	Right Option Id: 127003
Montessori	
Question 110 The centre point of a lesson plan is	Question Id: 128
Answer:	Option Id
(A) principal	128001
(B) teacher	128002
(C) student	128003
(D) none of the above	128004
Right Answer: student	Right Option Id: 128003
State	
Question 111 According to Howard Gardner, a philosopher has Type of intelligence and a sculptor has more type of intelligence and a sculptor has more	Question Id: 129 ence.
Answer:	Option Id
(A) interpersonal; linguistic	129001
(B) linguistic; interpersonal	129002
(C) spatial; intrapersonal	129003
(D) intrapersonal; spatial	129004
Pt-lat Avenue	D'-l-1 O-1' I-l-120004
Right Answer: intrapersonal; spatial	Right Option Id : 129004
Question 112	Question Id: 108
Which of the following is an example of an internal attribution for failure?	
Answer : (A) I failed the test because my friends were distracting me.	Option Id 108001
(B) I received a low grade because the teacher is a tough grader.	
(C) I failed the test because I didn't study enough.	108002
	108003
(D) I didn't get good marks because the teacher was biased.	108004
Right Answer:	Right Option Id : 108003
I failed the test because I didn't study enough.	-

Question 113
Question Id: 130

Which of the following is an example of a question that requires students to reflect on their own thinking?

Answer:

(A) how has your thinking about the use of verbs changed since the beginning of the class?

	130001
(B) what is the relationship between nouns and verbs in a sentence?	130002
(C) what is the definition of a verb?	130003
(D) how do you change a verb to the present tense?	130004
Right Answer: now has your thinking about the use of verbs changed since the beginning of the class?	Right Option Id : 130001
Question 114	Question Id : 122
Micro teaching is more effective Answer:	Option Id
A) always	122001
B) after the teaching-practice	122002
C) during the teaching-practice	122003
D) during the preparation for teaching-practice	122004
Right Answer: during the teaching-practice	Right Option Id : 122003
Question 115 Which of the following are the characteristics of a person with scientific attitude?	Question Id: 118
Answer:	Option Id
A) Brevity	118001
B) Objectivity	118002
C) Adventure	118003
D) Sharp memory	118004
Right Answer : Objectivity	Right Option Id : 118002
Question 116 Library man Provide	Question Id: 115
Answer:	Option Id
A) Physical mateial	115001
B) Digital material	115002
C) Both A & B	115003
D) None of these	115004
Right Answer : Both A & B	Right Option Id : 115003
Question 117 Which of the following components are essential for library?	Question Id: 116
Answer:	Option Id
A) Learning	116001
B) Walking	116002
(C) Playing	116003

(D) None of these	116004
Right Answer: Learning	Right Option Id : 116001
Question 118	Question Id : 101
A teacher should ask- Answer:	Option Id
(A) meaningful question	101001
(B) maximum number of question in a fixed time	101002
(C) as many question as possible	101003
(D) None of these	101004
Right Answer: meaningful question	Right Option Id : 101001
Question 119	Question Id: 102
Which of the following important cause of failure for teacher? Answer:	Option Id
(A) interpersonal relationship	102001
(B) verbal ability	102002
(C) lack of command over the knowledge of subject	102003
(D) None of the above	102004
Right Answer: lack of command over the knowledge of subject	Right Option Id : 102003
	Right Option Id : 102003 Question Id : 104
lack of command over the knowledge of subject	
Question 120 Teacher should master during his teaching period	Question Id : 104
Question 120 Teacher should master during his teaching period Answer:	Question Id : 104 Option Id
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method	Question Id : 104 Option Id 104001
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method	Question Id : 104 Option Id 104001 104002
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B	Question Id : 104 Option Id 104001 104002 104003
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method	Question Id : 104 Option Id 104001 104002 104003 104004
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method	Question Id : 104 Option Id 104001 104002 104003 104004 Right Option Id : 104002
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method	Question Id : 104 Option Id 104001 104002 104003 104004 Right Option Id : 104002
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method	Question Id : 104 Option Id 104001 104002 104003 104004 Right Option Id : 104002 Question Id : 105 Option Id
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method	Question Id : 104 Option Id 104001 104002 104003 104004 Right Option Id : 104002 Question Id : 105 Option Id 105001
Question 120 Teacher should master during his teaching period Answer: (A) in one of the teaching method (B) equally acros all teaching method (C) Both A & B (D) None of these Right Answer: equally acros all teaching method Question 121 Knowledge is- Answer: (A) Information (B) Application	Question Id : 104 Option Id 104001 104002 104003 104004 Right Option Id : 104002 Question Id : 105 Option Id 105001 105002

Question 122	Question Id: 106
Formative evaluation is conducted Answer:	Option Id
(A) After the teaching learning process	106001
(B) Before the teaching learning process	106002
(C) During the teaching learning process	106003
(D) All of the above	106004
Right Answer: During the teaching learning process	Right Option Id: 106003
Question 123	Question Id: 107
Which technique is used for evaluation of interest? Answer:	Option Id
(A) Observation technique	107001
(B) Check list	107002
(C) Rating scale	
(D) Projective Technique	107003
(b) Projective reclinique	107004
Right Answer:	Right Option Id: 107003
Rating scale	
Question 124 Which of the following is not a type of curriculum design?	Question Id: 103
Answer:	Option Id
(A) Subject-centered	103001
(B) Problem Centered	103002
(C) Learner-Centered	103003
(D) Teacher-Centered	103004
Dight Anguay	Diabt Oution Id : 102004
Right Answer: Teacher-Centered	Right Option Id : 103004
Question 125	Question Id: 109
Which of the following is not the nature of curriculum? Answer:	Option Id
(A) Critical	109001
(B) Creative	109002
(C) Conservative	
(D) Active	109003
	109004
Right Answer:	Right Option Id: 109004
Active	
Question 126	Question Id: 110

Option Id

Answer :
(A) Fundamentalism

The biggest challenge before democracy is -

	110001
(B) Castism	110002
(C) Regionalism	110003
(D) All the above	110004
Right Answer: Fundamentalism	Right Option Id : 110001
Question 127 A teacher shoul behave with all the student as -	Question Id: 111
Answer:	Option Id
(A) as a friend	111001
(B) as a master	111002
(C) equally	111003
(D) personally	111004
Right Answer: as a friend	Right Option Id : 111001
Question 128	Question Id : 112
Failure can be our best teacher if- Answer :	Option Id
(A) we work harder than before	112001
(B) we know the reasons of failure	112002
(C) we know the reasons of failure and then being encouraged we work harder than before	112003
(D) none of the above	112004
Right Answer: we know the reasons of failure and then being encouraged we work harder than before	Right Option Id : 112003
Question 129	Question Id: 113
Chal-Board is a kind of teaching aid- Answer :	Option Id
(A) Visual	113001
(B) Audio	113002
(C) Audio-Visual	113003
(D) All of the above	113004
Right Answer: Visual	Right Option Id : 113001
Question 130 Television is	Question Id: 114
Answer:	Option Id
(A) Visual aid	114001
(B) Audio-visual aid	114002
(C) Audio aid	114003

(D) None of the above	114004
Right Answer: Audio-visual aid	Right Option Id : 114002
Other Skills	
Question 131 There were widespread rises against the British in the 1820s. Which one of the following did not revolt in the 1820s? Answer:	Question Id: 149 Option Id
(A) Santhals	149001
(B) Ahoms	149002
(C) Pagal Panthis	149003
(D) Ramosi	149004
Right Answer: Santhals	Right Option Id : 149001
Question 132 If the Sun rises at Tirap in Arunachal Pradesh at 5.00 am (IST), then when (IST) the Sun will rise in Kandla, Gujarat?	Question Id: 148
Answer: (A) About 5.00 a.m.	Option Id 148001
(B) About 6.20 a.m.	148002
(C) About 7.30 a.m.	148003
(D) About 7.00 a.m.	148004
Right Answer: About 7.00 a.m.	Right Option Id : 148004
Question 133 What is the maximum investment by any single investor in an Indian company?	Question Id : 147
Answer:	Option Id
(A) 10%	147001
(B) 15%	147002
(C) 20%	147003
(D) 25%	147004
Right Answer: 10%	Right Option Id : 147001
Question 134 Who among the following was not related to Champaran Satyagraha?	Question Id : 146
Answer : (A) Dr. Rajendra Prasad	Option Id
(B) Anugrah Narayan Singh	146001 146002
(C) JB Kriplani	146002
(D) Jai Prakash Narayan	146004
Right Answer : Jai Prakash Narayan	Right Option Id : 146004

	Question Id: 145
Visva-Bharati University, which was seen in the news recently, is located in which state? Answer:	Option Id
(A) Uttar Pradesh	145001
(B) Bihar	145002
(C) West Bengal	145003
(D) Odisha	145004
Right Answer: West Bengal	Right Option Id: 145003
0 11 126	0 11 444
Question 136 Rama plays cricket with his friends every evening. Which energy does he use to play cricket?	Question Id: 144
Answer:	Option Id
(A) Sound energy	144001
(B) Light energy	144002
(C) Chemical energy	144003
(D) Muscular energy	144004
Right Answer: Muscular energy	Right Option Id : 144004
Question 137 Which one of the following is 'sticky rice' and is a common variety of rice in Assam?	Question Id: 143
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer:	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice	
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer:	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice	Option Id 143001
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice	Option Id 143001 143002 143003
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice Question 138 When we burn fuels, we get: Answer:	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice Question 138 When we burn fuels, we get:	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice Question 138 When we burn fuels, we get: Answer:	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice Question 138 When we burn fuels, we get: Answer: (A) Light and sound energy	Option Id
Which one of the following is 'sticky rice' and is a common variety of rice in Assam? Answer: (A) Ponni rice (B) Bora rice (C) Arborio rice (D) Bomba rice Right Answer: Bora rice Question 138 When we burn fuels, we get: Answer: (A) Light and sound energy (B) Only light energy	Option Id

Question 139 Question Id: 141

Answer:	Option Id
(A) They chew up their prey	141001
(B) They swallow their food whole	141002
(C) Snakes have sharp teeth	141003
(D) Poisonous snakes have fangs.	141004
Right Answer: They chew up their prey	Right Option Id : 141001
Question 140	Question Id: 131
With respect to Gujarat, the locations of Uttar Pradesh and Andhra Pradesh, respectively, are: Answer:	Option Id
(A) North-West; Saouth-East	131001
(B) North-West; South-West	131002
(C) North-East; South-West	131003
(D) North-East; South-East	131004
Right Answer: North-East; South-East	Right Option Id : 131004
Question 141 Which one of the following groups have all 3-dimensional shapes?	Question Id : 139
Answer:	Option Id
(A) Cube, Cuboid, Sphere, Cylinder	139001
(B) Cube, Cuboid, Semi-Circle, Cone	139002
(C) Cube, Cuboid, Circle, Cone	139003
(D) Cube, Cuboid, Circle, Triangle	139004
Right Answer : Cube, Cuboid, Sphere, Cylinder	Right Option Id : 139001
Question 142	Question Id: 138
What is the missing number in the pattern given below? 1, 6, 15,45, 66, 91 Answer:	Option Id
(A) 25	138001
(B) 36	138002
(C) 28	138003
(D) 32	138004
Right Answer: 28	Right Option Id : 138003
Question 143 A whole number is added to 100 and the same number is subtracted from 100. the sum of the two resulting numbers so obtain Answer:	Question Id : 137 ed is : Option Id
(A) 100	137001
(B) 200	137002
(C) 0	137003

(D) 50	137004
Right Answer: 200	Right Option Id : 137002
Question 144	Question Id : 136
The sum of 5 - 5 + 5 - 5 + 5 - 5, to odd number of terms is : Answer :	Option Id
(A) 5	136001
(B) 15	136002
(C) 0	136003
(D) -5	136004
Right Answer: 5	Right Option Id : 136001
Question 145 Which of the following arrangements represents a descending order of numbers?	Question Id : 135
Answer:	Option Id
(A) 10.5, 1.50, 1.055, 1.005, 0.155	135001
(B) 10.5, 1.50, 1.055, 1.05, 1.005, 0.155	135002
(C) 1.05, 1.005, 1.50, 1.055, 10.5, 0.155	135003
(D) 10.5, 1.05, 1.055, 1.50, 1.005, 0.155	135004
Right Answer : 10.5, 1.50, 1.055, 1.05, 1.005, 0.155	Right Option Id : 135002
	Right Option Id : 135002 Question Id : 134
10.5, 1.50, 1.055, 1.05, 1.005, 0.155	
10.5, 1.50, 1.055, 1.05, 1.005, 0.155 Question 146 Monday : April :: Friday : ?	Question Id: 134
10.5, 1.50, 1.055, 1.05, 1.005, 0.155 Question 146 Monday : April :: Friday : ? Answer :	Question Id : 134 Option Id
10.5, 1.50, 1.055, 1.05, 1.005, 0.155 Question 146 Monday : April :: Friday : ? Answer : (A) July	Question Id : 134 Option Id 134001
10.5, 1.50, 1.055, 1.05, 1.005, 0.155 Question 146 Monday : April :: Friday : ? Answer : (A) July (B) Saturday	Question Id : 134 Option Id 134001 134002
10.5, 1.50, 1.055, 1.05, 1.005, 0.155 Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August	Question Id : 134 Option Id 134001 134002 134003
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147	Question Id : 134 Option Id 134001 134002 134003 134004
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147 Choose the word which is least like the other words in the group. Answer:	Question Id : 134 Option Id 134001 134002 134003 134004 Right Option Id : 134003
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147 Choose the word which is least like the other words in the group. Answer: (A) Kidney	Question Id : 134 Option Id 134001 134002 134003 134004 Right Option Id : 134003
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147 Choose the word which is least like the other words in the group. Answer: (A) Kidney (B) Heart	Question Id : 134 Option Id 134001 134002 134003 134004 Right Option Id : 134003 Question Id : 133 Option Id
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147 Choose the word which is least like the other words in the group. Answer: (A) Kidney (B) Heart (C) Lung	Question Id : 134 Option Id 134001 134002 134003 134004 Right Option Id : 134003 Question Id : 133 Option Id 133001
Question 146 Monday: April:: Friday:? Answer: (A) July (B) Saturday (C) August (D) Tuesday Right Answer: August Question 147 Choose the word which is least like the other words in the group. Answer: (A) Kidney (B) Heart	Question Id: 134 Option Id

Question 148	Question Id: 132
60,30,120,15,240? Answer:	Option Id
(A) 30	132001
(B) 120	132002
(C) 140	132003
(D) 71/2	132004
	132004
Right Answer: 71/2	Right Option Id: 132004
11/2	
Question 149	Question ld : 140
In a certain code, if BAD is written as YZW and SAID is written as HZRW, then LIFE will be written as: Answer:	Option Id
(A) ORUV	140001
(B) OSUV	140002
(C) OQVU	140003
(D) ORVW	140004
	140004
Right Answer: ORUV	Right Option Id: 140001
Question 150 Pointing towards Sita, Nikhil said, "I am the only son of her mother's son". How is Sita related to Nikhil?	Question ld : 150
Answer:	Option Id
(A) Aunt	150001
(B) Niece	150002
(C) Mother	150003
(D) Cousin	150004
Right Answer: Aunt	Right Option Id : 150001