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Q.51 Match List - I with List - II.

- | List - I | List - II |
|--------------|--|
| (A) BCNF iff | (I) every JD is implied by the candidate keys |
| (B) 5 NF iff | (II) all underlying domains contain scalar values only |
| (C) 1 NF iff | (III) every MVD is implied by the candidate keys |
| (D) 4 NF iff | (IV) every FD is implied by the candidate keys |

Choose the **correct** answer from the options given below :

- (1) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (2) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(IV), (B)-(I), (C)-(III), (D)-(II)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025057**

Option 1 ID : **87827098913**

Option 2 ID : **87827098914**

Option 3 ID : **87827098915**

Option 4 ID : **87827098916**

Status : **Answered**

Chosen Option : **2**

Q.52 Match List - I with List - II according to input to the compiler phase that process it :

- | List - I | List - II |
|---------------------------------|------------------------|
| (A) Syntax tree | (I) Code generator |
| (B) Intermediate representation | (II) Semantic analyzer |
| (C) Token stream | (III) Lexical analyzer |
| (D) Character stream | (IV) Syntax analyser |

Choose the **correct** answer from the options given below :

- (1) (A)-(IV), (B)-(III), (C)-(I), (D)-(II)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (4) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025059**

Option 1 ID : **87827098921**

Option 2 ID : **87827098922**

Option 3 ID : **87827098923**

Option 4 ID : **87827098924**

Status : **Answered**

Chosen Option : **2**

- Q.53** One of the purposes of using intermediate code in compilers is to :
- (1) make parsing and semantic analysis simpler
 - (2) improve error recovery and error reporting
 - (3) increase the chances of reusing the machine independent code optimizer in other compilers
 - (4) improve the register allocation

- Options**
1. 1
 2. 2
 3. 3
 4. 4

Question Type : **MCQ**
Question ID : **87827025018**
Option 1 ID : **87827098757**
Option 2 ID : **87827098758**
Option 3 ID : **87827098759**
Option 4 ID : **87827098760**
Status : **Answered**
Chosen Option : **3**

- Q.54** Match List - I with List - II.

List - I

- (A) Monoalphabetic Cipher
- (B) DES
- (C) Stream Cipher
- (D) Polyalphabetic Cipher

List - II

- (I) Round key
- (II) One-to-many relationship
- (III) One-to-one relationship
- (IV) Feedback mechanism

Choose the **correct** answer from the options given below :

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)
- (3) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)
- (4) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)

- Options**
1. 1
 2. 2
 3. 3
 4. 4

Question Type : **MCQ**
Question ID : **87827025062**
Option 1 ID : **87827098933**
Option 2 ID : **87827098934**
Option 3 ID : **87827098935**
Option 4 ID : **87827098936**
Status : **Answered**
Chosen Option : **2**

Q.55 Which of the following are tautology ?

- (A) $(P \rightarrow (P \wedge Q)) \rightarrow (P \rightarrow Q)$
(B) $((P \rightarrow Q) \rightarrow Q) \rightarrow (P \vee Q)$
(C) $((P \vee \neg P) \rightarrow Q) \rightarrow ((P \vee \neg P) \rightarrow R)$
(D) $(Q \rightarrow (P \wedge \neg P)) \rightarrow (R \rightarrow (P \wedge \neg P))$

Choose the **correct** answer from the options given below :

- (1) (A) Only
(2) (B) Only
(3) (A) and(B) Only
(4) (C) and (D) Only

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025034**

Option 1 ID : **87827098821**

Option 2 ID : **87827098822**

Option 3 ID : **87827098823**

Option 4 ID : **87827098824**

Status : **Answered**

Chosen Option : **3**

Q.56 Consider a triangle PQR with coordinates as P(0,0), Q(2,2) and R(10,4). If this triangle is to be magnified to four times its size while keeping R(10, 4) fixed, then the coordinates of the magnified triangle are :

- (1) (-20, -12), Q(-20, -4) and R(10, 4)
(2) (-30, -12), Q(-22, -4) and R(10, 4)
(3) (-25, -10), Q(22, -4) and R(10, 4)
(4) (30, -12), Q(-22, 4) and R(10, 4)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827024997**

Option 1 ID : **87827098673**

Option 2 ID : **87827098674**

Option 3 ID : **87827098675**

Option 4 ID : **87827098676**

Status : **Answered**

Chosen Option : **1**

Q.57 The selection of Spiral Model based on characteristics of requirements :

- (A) Are requirements easily understandable and defined ?
- (B) Do we change requirements quite often ?
- (C) Can we define requirements early in the cycle ?
- (D) Requirements are indicating a complex to be built

Choose the **correct** answer from the options given below :

- (1) (C) Only
- (2) (B) Only
- (3) (B) and (D) Only
- (4) (A) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025048**

Option 1 ID : **87827098877**

Option 2 ID : **87827098878**

Option 3 ID : **87827098879**

Option 4 ID : **87827098880**

Status : **Answered**

Chosen Option : 1

Q.58 Consider the following code segment :

```
int arr [ ] = {0, 1, 2, 3, 4};
```

```
int i=1, *ptr;
```

```
ptr = arr + 2;
```

arrange the following printf statements in the increasing order of their output.

- (A) printf ("%d", ptr[i]);
- (B) printf ("%d", ptr[i + 1]);
- (C) printf ("%d", ptr[-i]);
- (D) printf ("%d", ptr[-i + 1]);

Choose the **correct** answer from the options given below :

- (1) (C), (A), (B), (D)
- (2) (C), (D), (A), (B)
- (3) (D), (A), (B), (C)
- (4) (A), (B), (D), (C)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025066**

Option 1 ID : **87827098949**

Option 2 ID : **87827098950**

Option 3 ID : **87827098951**

Option 4 ID : **87827098952**

Status : **Answered**

Chosen Option : 2

- Q.59** Arrange the following in ascending order :
- (A) Remainder of 49^{16} when divided by 17
 - (B) Remainder of 2^{446} when divided by 9
 - (C) Remainder of 155^{17} when divided by 17
 - (D) Last digits of the number 7^{45}

Choose the **correct** answer from the options given below :

- (1) (A), (B), (C), (D)
- (2) (A), (B), (D), (C)
- (3) (A), (C), (B), (D)
- (4) (D), (C), (B), (A)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025064**

Option 1 ID : **87827098941**

Option 2 ID : **87827098942**

Option 3 ID : **87827098943**

Option 4 ID : **87827098944**

Status : **Answered**

Chosen Option : **2**

Q.60 Consider the following functions :

$$f(n) = 3n^{\sqrt{n}}$$

$$g(n) = 2^{\sqrt{n}} \log_2^n$$

$$h(n) = n!$$

Which of the following is true ?

- (1) $h(n)$ is $O(f(n))$
- (2) $h(n)$ is $O(g(n))$
- (3) $g(n)$ is not $O(f(n))$
- (4) $f(n)$ is $O(g(n))$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 87827025015

Option 1 ID : 87827098745

Option 2 ID : 87827098746

Option 3 ID : 87827098747

Option 4 ID : 87827098748

Status : Answered

Chosen Option : 2

Q.61 2-3-4 trees are B - trees of order 4. They are isometric of _____ trees.

- (1) AVL
- (2) AA
- (3) 2-3
- (4) Red-Black

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 87827025016

Option 1 ID : 87827098749

Option 2 ID : 87827098750

Option 3 ID : 87827098751

Option 4 ID : 87827098752

Status : Answered

Chosen Option : 4

- Q.62** Indexed/grouped allocation is useful as :
- (A) It supports both sequential and direct access.
 - (B) Entire block is available for data.
 - (C) It does not require lots of space for keeping pointers.
 - (D) No external fragmentation.

Choose the **correct** answer from the options given below :

- (1) (A) Only
- (2) (B) and (C) Only
- (3) (B) Only
- (4) (A), (B) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025040**

Option 1 ID : **87827098845**

Option 2 ID : **87827098846**

Option 3 ID : **87827098847**

Option 4 ID : **87827098848**

Status : **Answered**

Chosen Option : **4**

Q.63 The prototyping model has the sequence :

- (A) Customer Evaluation
- (B) Quick design
- (C) Requirements
- (D) Implement
- (E) Design

Choose the **correct** answer from the options given below :

- (1) (C)→(A)→(D)→(B)→(E)
- (2) (B)→(C)→(A)→(D)→(E)
- (3) (C)→(B)→(D)→(A)→(E)
- (4) (E)→(B)→(C)→(D)→(A)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025070**

Option 1 ID : **87827098965**

Option 2 ID : **87827098966**

Option 3 ID : **87827098967**

Option 4 ID : **87827098968**

Status : **Answered**

Chosen Option : **3**

Q.64 Arrange the following steps in the correct order for a DHCP Client to renew its IP lease with a DHCP server :

- (A) DHCP client sends a DHCPREQUEST message
- (B) DHCP server acknowledges the renewal with a DHCPACK message
- (C) DHCP client checks the local lease timer and initiates renewal
- (D) DHCP server updates its lease database

Choose the **correct** answer from the options given below :

- (1) (A), (B), (C), (D)
- (2) (C), (D), (B), (A)
- (3) (C), (B), (A), (D)
- (4) (C), (A), (B), (D)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025072**

Option 1 ID : **87827098973**

Option 2 ID : **87827098974**

Option 3 ID : **87827098975**

Option 4 ID : **87827098976**

Status : **Answered**

Chosen Option : **4**

Q.65 In the content of Alpha Beta pruning in game trees which of the following statements are correct regarding cut off procedures ?

- (A) Alpha Beta pruning can eliminate subtrees with certainty when the value of a node exceeds both the alpha and beta bonds.
- (B) The primarily purpose of Alpha-Beta proning is to save computation time by searching fewer nodes in the same tree.
- (C) Alpha Beta pruning guarantees the optimal solution in all cases by exploring the entire game tree.
- (D) Alpha and Beta bonds are initialized to negative and positive infinity respectively at the root note.

Choose the **correct** answer from the options given below :

- (1) (A), (C), (D) Only
- (2) (B), (C), (D) Only
- (3) (A), (B), (D) Only
- (4) (C), (B) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025053**

Option 1 ID : **87827098897**

Option 2 ID : **87827098898**

Option 3 ID : **87827098899**

Option 4 ID : **87827098900**

Status : **Answered**

Chosen Option : **1**

Q.66 Which of the following statements is/are NOT CORRECT about NUMA ?

- (A) LOAD and STORE instructions are used to access remote memory.
- (B) There is a single address space visible to all CPU.
- (C) Access to local memory is slower than access to remote memory.
- (D) When the access time to remote memory is hidden, the system is called NC - NUMA.
- (E) In CC - NUMA, Coherent caches are present.

Choose the **correct** answer from the options given below :

- (1) (A) and (C) Only
- (2) (B) and (D) Only
- (3) (A) and (E) Only
- (4) (C) and (D) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025039**

Option 1 ID : **87827098841**

Option 2 ID : **87827098842**

Option 3 ID : **87827098843**

Option 4 ID : **87827098844**

Status : **Answered**

Chosen Option : **4**

Q.67 Level - 0 DFD is also called as :

- (1) Use case Diagram
- (2) Sequence Diagram
- (3) Context Diagram
- (4) Prototype Diagram

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025024**

Option 1 ID : **87827098781**

Option 2 ID : **87827098782**

Option 3 ID : **87827098783**

Option 4 ID : **87827098784**

Status : **Answered**

Chosen Option : **2**

Q.68 Given below are two statements :

Statement (I) : If H is non empty finite subset of a group G and $a \in H \forall a, b \in H$, then H is also a group

Statement (II) : There is no homomorphism exist from $(Z, +)$ to $(Q, +)$; where Z is set of integers and Q is set of rational number.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025074**

Option 1 ID : **87827098981**

Option 2 ID : **87827098982**

Option 3 ID : **87827098983**

Option 4 ID : **87827098984**

Status : **Answered**

Chosen Option : **1**

Q.69 Which of the following is not a field in TCP header ?

- (1) Sequence Number
- (2) Checksum
- (3) Fregmentation offset
- (4) Window size

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025022**

Option 1 ID : **87827098773**

Option 2 ID : **87827098774**

Option 3 ID : **87827098775**

Option 4 ID : **87827098776**

Status : **Answered**

Chosen Option : **4**

Q.70 What is the output of the following program ?

```
# include <stdio.h>
# define SQR(x) (x*x)
int main ( )
{ int a, b=3;
  a = SQR(b + 2);
  printf(“ %d” ,a);
  return 0;
}
```

- (1) 25
- (2) 11
- (3) Garbage value
- (4) 24

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025004**

Option 1 ID : **87827098701**

Option 2 ID : **87827098702**

Option 3 ID : **87827098703**

Option 4 ID : **87827098704**

Status : **Answered**

Chosen Option : **1**

Q.71 If universe of discourse are all real numbers, then which of the following are true ?

- (A) $\exists x \forall y (x + y = y)$
 (B) $\forall x \forall y ((x \geq 0) \wedge (y < 0)) \rightarrow (x - y > 0)$
 (C) $\exists x \exists y ((x \leq 0) \wedge (y \leq 0)) \wedge (x - y > 0)$
 (D) $\forall x \forall y ((x \neq 0) \wedge (y \neq 0)) \leftrightarrow (xy \neq 0)$

Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
 (2) (A), (C) and (D) Only
 (3) (A), (B) and (D) Only
 (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2
 3. 3
 4. 4

Question Type : **MCQ**

Question ID : **87827025029**

Option 1 ID : **87827098801**

Option 2 ID : **87827098802**

Option 3 ID : **87827098803**

Option 4 ID : **87827098804**

Status : **Answered**

Chosen Option : 1

Q.72 Match List - I with List - II.

List - I

Propositions

- (A) $P \wedge (P \rightarrow Q)$
 (B) $\neg (P \vee Q) \rightarrow (P \wedge Q)$
 (C) $P \rightarrow Q$
 (D) $P \vee (Q \wedge R)$

List - II

Disjunctive Normal Form (DNF)

- (I) $P \vee Q$
 (II) $(P \wedge \neg P) \vee (P \wedge Q)$
 (III) $(\neg P) \vee Q$
 (IV) $(P \wedge P) \vee (P \wedge Q) \vee (P \wedge R) \vee (Q \wedge R)$

Choose the **correct** answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
 (2) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
 (3) (A)-(III), (B)-(I), (C)-(II), (D)-(IV)
 (4) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

Options 1. 1

2. 2
 3. 3
 4. 4

Question Type : **MCQ**

Question ID : **87827025060**

Option 1 ID : **87827098925**

Option 2 ID : **87827098926**

Option 3 ID : **87827098927**

Option 4 ID : **87827098928**

Status : **Answered**

Chosen Option : 3

- Q.73** Which one of the following statements are CORRECT ?
- (A) Granularity is the size of data item in a database.
 - (B) Two operations in a schedule are said to be conflict if they belong to same transaction.
 - (C) Two schedulers are said to be conflict equivalent if the order of any two conflicting operations is the same in both schedules.
 - (D) Write operations which are performed without performing the write operation are known as Blind Writes.

Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
- (2) (A), (B) and (C) Only
- (3) (A), (B) and (D) Only
- (4) (B) and (C) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025037**

Option 1 ID : **87827098833**

Option 2 ID : **87827098834**

Option 3 ID : **87827098835**

Option 4 ID : **87827098836**

Status : **Answered**

Chosen Option : **1**

- Q.74** Which of the following are commonly used parsing techniques in NLP (Natural Language Processing) for syntatic analysis.

- (A) Top down parsing
- (B) Bottom Up parsing
- (C) Dependency parsing
- (D) Statistical machine translation
- (E) Earley parsing

Choose the **correct** answer from the options given below :

- (1) (A), (C), (D), (E) Only
- (2) (B), (C), (D), (E) Only
- (3) (A), (B), (C), (E) Only
- (4) (A) and (B) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025052**

Option 1 ID : **87827098893**

Option 2 ID : **87827098894**

Option 3 ID : **87827098895**

Option 4 ID : **87827098896**

Status : **Answered**

Chosen Option : **4**

Q.75 A multiplex combines for 100 Kbps channels using a time slot of 2 bits. What is the bit rate ?

- (1) 100 Kbps
- (2) 200 Kbps
- (3) 40 Kbps
- (4) 1000 Kbps

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025021**

Option 1 ID : **87827098769**

Option 2 ID : **87827098770**

Option 3 ID : **87827098771**

Option 4 ID : **87827098772**

Status : **Answered**

Chosen Option : **2**

Q.76 What is the result of evaluating the postfix expression " $43*25*+b-$ " ?

- (1) 8
- (2) 14
- (3) 10
- (4) 5

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827024992**

Option 1 ID : **87827098653**

Option 2 ID : **87827098654**

Option 3 ID : **87827098655**

Option 4 ID : **87827098656**

Status : **Answered**

Chosen Option : **2**

Q.77 In "bit stuffing", each frame begins and ends with a bit pattern in hexadecimal ?

- (1) 0x8C
- (2) 0x6F
- (3) 0xFF
- (4) 0x7E

Options

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025023**

Option 1 ID : **87827098777**

Option 2 ID : **87827098778**

Option 3 ID : **87827098779**

Option 4 ID : **87827098780**

Status : **Answered**

Chosen Option : **3**

Q.78 In Linux, where is the user password stored ?

- (1) /etc/password
- (2) /root/password
- (3) /etc/passwd
- (4) /root/passwd

Options

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025007**

Option 1 ID : **87827098713**

Option 2 ID : **87827098714**

Option 3 ID : **87827098715**

Option 4 ID : **87827098716**

Status : **Answered**

Chosen Option : **3**

Q.79 Which of the statement are CORRECT ?

- (A) Constructors are invoked automatically when the objects are created.
- (B) Constructors do not have return types, not even void and therefore they cannot return values.
- (C) Constructors cannot be inherited though a derived class can call the base class constructors.
- (D) Constructors can be declared as virtual.

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (D) Only
- (2) (A), (B) and (C) Only
- (3) (B), (C) and (D) Only
- (4) (A), (C) and (D) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025036**

Option 1 ID : **87827098829**

Option 2 ID : **87827098830**

Option 3 ID : **87827098831**

Option 4 ID : **87827098832**

Status : **Answered**

Chosen Option : **2**

Q.80 Arrange the following phases of a compiler as per their order of execution (start to end)

- (A) Target code generation
- (B) Syntax Analysis
- (C) Code optimization
- (D) Semantic Analysis
- (E) Lexical Analysis

Choose the **correct** answer from the options given below :

- (1) (B), (E), (D), (A), (C)
- (2) (E), (D), (B), (A), (C)
- (3) (E), (B), (D), (C), (A)
- (4) (B), (D), (E), (A), (C)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025069**

Option 1 ID : **87827098961**

Option 2 ID : **87827098962**

Option 3 ID : **87827098963**

Option 4 ID : **87827098964**

Status : **Answered**

Chosen Option : **3**

Q.81 The Hue of a colour is related to its :

- (1) Luminance
- (2) Saturation
- (3) Incandescence
- (4) Wavelength

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025000**

Option 1 ID : **87827098685**

Option 2 ID : **87827098686**

Option 3 ID : **87827098687**

Option 4 ID : **87827098688**

Status : **Answered**

Chosen Option : **3**

Q.82 Which of the following statements are CORRECT ?

- (A) A process always check state of currently executing process to enter critical schema.
- (B) Spin locks uses busy waiting.
- (C) Periodically testing a variable until some value appear is known as busy waiting.
- (D) Critical region is a part of program, where shared memory is kept.
- (E) Printer daemon, continuously checks to see if there are any file to be printed.

Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
- (2) (B) and (C) Only
- (3) (B) and (D) Only
- (4) (B) and (E) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025041**

Option 1 ID : **87827098849**

Option 2 ID : **87827098850**

Option 3 ID : **87827098851**

Option 4 ID : **87827098852**

Status : **Answered**

Chosen Option : **3**

Q.83 If the universe of discourse is set of integers, then which of the followings are TRUE ?

- (A) $\forall n \exists m(n^2 < m)$
- (B) $\exists n \forall m(n < m^2)$
- (C) $\exists n \forall m(nm = m)$
- (D) $\exists n \exists m(n^2 + m^2 = 6)$
- (E) $\exists n \exists m(n + m = 4 \wedge n - m = 1)$

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (C) Only
- (2) (B) and (C) Only
- (3) (C), (D) and (E) Only
- (4) (C) and (E) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025030**

Option 1 ID : **87827098805**

Option 2 ID : **87827098806**

Option 3 ID : **87827098807**

Option 4 ID : **87827098808**

Status : **Answered**

Chosen Option : **2**

Q.84 What is the output of the following program ?

```
#include<stdio.h>
int main( )
{ int i=3;
while (i --)
{ int i=10;
    i --;
printf(“%d”, i);
}
printf(“%d”, i);
}
```

- (1) 990
- (2) 9990
- (3) 999 – 1
- (4) 99 – 1

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827024999**

Option 1 ID : **87827098681**

Option 2 ID : **87827098682**

Option 3 ID : **87827098683**

Option 4 ID : **87827098684**

Status : **Answered**

Chosen Option : **1**

Q.85 Which collision resolution technique involves maintaining a linked list of collided keys ?

- (1) Linear probing
- (2) Quadratic probing
- (3) Chaining
- (4) Double hashing

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025014**

Option 1 ID : **87827098741**

Option 2 ID : **87827098742**

Option 3 ID : **87827098743**

Option 4 ID : **87827098744**

Status : **Answered**

Chosen Option : **3**

Q.86 Which of the following are example of CSMA channel sensing methods ?

- (A) 1-persistent
- (B) 2-persistent
- (C) p-persistent
- (D) o-persistent

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (D) Only
- (2) (A), (C) and (D) Only
- (3) (B), (C) and (D) Only
- (4) (A), (B) and (C) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025047**

Option 1 ID : **87827098873**

Option 2 ID : **87827098874**

Option 3 ID : **87827098875**

Option 4 ID : **87827098876**

Status : **Answered**

Chosen Option : **4**

Q.87 Match List - I with List - II.

List - I

- (A) Bresenham
- (B) Cohen-Sutherland
- (C) Sutherland-Hodgeman
- (D) Z-Buffer

List - II

- (I) Hidden surface removal
- (II) Line drawing algorithm
- (III) Line clipping algorithm
- (IV) Polygon clipping algorithm

Choose the **correct** answer from the options given below :

- (1) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)
- (4) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025056**

Option 1 ID : **87827098909**

Option 2 ID : **87827098910**

Option 3 ID : **87827098911**

Option 4 ID : **87827098912**

Status : **Answered**

Chosen Option : **3**

Q.88 Let $L = \{ab, aa, baa\}$. Which of the following strings are not in L^* .

- (1) abaabaaabaa
- (2) aaaabaaaa
- (3) baaaaabaaaab
- (4) baaaaabaa

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025009**

Option 1 ID : **87827098721**

Option 2 ID : **87827098722**

Option 3 ID : **87827098723**

Option 4 ID : **87827098724**

Status : **Answered**

Chosen Option : **3**

Q.89 The interface(s) that provide(s) I/O transfer of data directly to and from the memory unit peripheral is/are termed as :

- (A) DMA (Direct Memory Access)
- (B) IOP (Input-Output Processor)
- (C) Serial Interface
- (D) Parallel Interface

Choose the **correct** answer from the options given below :

- (1) (A) Only
- (2) (B) Only
- (3) (A) and (B) Only
- (4) (C) and (D) Only

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025032**

Option 1 ID : **87827098813**

Option 2 ID : **87827098814**

Option 3 ID : **87827098815**

Option 4 ID : **87827098816**

Status : **Answered**

Chosen Option : **1**

- Q.90** In a genetic algorithm optimization problem the fitness function is defined as $f(x) = x^2 - 4x + 4$. Given a population of four individuals with values of x : {1.5, 2.0, 3.0, 4.5} What is the fitness value of the individual that will be selected as the parent for reproduction in one generation ?
- (1) 2.25
 - (2) 6.0
 - (3) 0.0
 - (4) 6.25

- Options**
1. 1
 2. 2
 3. 3
 4. 4

Question Type : **MCQ**
Question ID : **87827025027**
Option 1 ID : **87827098793**
Option 2 ID : **87827098794**
Option 3 ID : **87827098795**
Option 4 ID : **87827098796**
Status : **Answered**
Chosen Option : **1**

- Q.91** In a feed forward neural network with the following specifications : Input layer has 4 neurons, hidden layer has 3 neurons and output layer has 2 neurons using the sigmoid activation function for given input values [0.5, 0.8, 0.2, 0.6] as well as the initial weights for the connections.

W1 : [0.1, 0.3, 0.5, 0.2]
W2 : [0.2, 0.4, 0.6, 0.2]
W3 : [0.3, 0.5, 0.7, 0.2]

Input layer to hidden layer weights

W4 : [0.4, 0.1, 0.3]
W5 : [0.5, 0.2, 0.4]

Hidden layer to output layer weights

What is the output of the output layer when the given input values are passed through neural network ? Round the answer to two decimal places :

- (1) [0.62, 0.68]
- (2) [0.72, 0.78]
- (3) [0.82, 0.88]
- (4) [0.92, 0.98]

- Options**
1. 1
 2. 2
 3. 3
 4. 4

Question Type : **MCQ**
Question ID : **87827025028**
Option 1 ID : **87827098797**
Option 2 ID : **87827098798**
Option 3 ID : **87827098799**
Option 4 ID : **87827098800**
Status : **Answered**
Chosen Option : **2**

Q.92 "CREATE TABLE T" in SQL is an example of :

- (1) Normalization
- (2) DML
- (3) DDL
- (4) Primary key

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025001**

Option 1 ID : **87827098689**

Option 2 ID : **87827098690**

Option 3 ID : **87827098691**

Option 4 ID : **87827098692**

Status : **Answered**

Chosen Option : **3**

Q.93 Which data structure is typically used to implement hash table ?

- (1) Linked list
- (2) Array
- (3) Binary Tree
- (4) Stack

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025013**

Option 1 ID : **87827098737**

Option 2 ID : **87827098738**

Option 3 ID : **87827098739**

Option 4 ID : **87827098740**

Status : **Answered**

Chosen Option : **2**

- Q.94** Which of the following is/are NOT CORRECT statement ?
- (A) The first record in each block of the data file is known as actor record.
 - (B) Dense index has index entries for every search key value in the data file.
 - (C) Searching is harder in the B⁺ tree than B- tree as the all external nodes linked to each other.
 - (D) In extendible hashing the size of directory is just an array of 2^{d-1} , where d is global depth.
- Choose the **correct** answer from the options given below :
- (1) (A), (B) and (C) Only
 - (2) (A), (C) and (D) Only
 - (3) (A), (B) and (D) Only
 - (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025038**

Option 1 ID : **87827098837**

Option 2 ID : **87827098838**

Option 3 ID : **87827098839**

Option 4 ID : **87827098840**

Status : **Answered**

Chosen Option : **2**

- Q.95** Arrange the following encoding strategies used in Genetic Algorithms (GAs) in the correct sequence starting from the initial step and ending with the final representation of solutions :
- (A) Binary Encoding
 - (B) Real valued Encoding
 - (C) Permutation Encoding
 - (D) Gray coding
- Choose the **correct** answer from the options given below :
- (1) (D), (B), (A), (C)
 - (2) (B), (D), (A), (C)
 - (3) (C), (D), (A), (B)
 - (4) (B), (C), (A), (D)

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025071**

Option 1 ID : **87827098969**

Option 2 ID : **87827098970**

Option 3 ID : **87827098971**

Option 4 ID : **87827098972**

Status : **Answered**

Chosen Option : **1**

- Q.96** If $N^2 = N \times N$, N is set of natural numbers and R is relation on N^2 , s.t. $R \subset N^2 \times N^2$ i.e. $\langle x, y \rangle R \langle u, v \rangle \Leftrightarrow xv = yu$, then which of the followings are TRUE ?
- (A) Reflexive
 - (B) Symmetric
 - (C) Transitive
 - (D) Assymmetric
- Choose the **correct** answer from the options given below :
- (1) (A) and (B) Only
 - (2) (B) and (C) Only
 - (3) (A), (C) and (D) Only
 - (4) (A), (B) and (C) Only

- Options**
- 1. 1
 - 2. 2
 - 3. 3
 - 4. 4

Question Type : **MCQ**
Question ID : **87827025031**
Option 1 ID : **87827098809**
Option 2 ID : **87827098810**
Option 3 ID : **87827098811**
Option 4 ID : **87827098812**
Status : **Answered**
Chosen Option : **4**

- Q.97** Given below are two statements :
- Statement (I)** : The friend function and the member functions of a friend class directly access the private and protected data.
- Statement (II)** : The friend function can access the private data through the member functions of the base class
- In the light of the above statements, choose the **most appropriate answer** from the options given below :
- (1) Both **Statement I** and **Statement II** are correct
 - (2) Both **Statement I** and **Statement II** are incorrect
 - (3) **Statement I** is correct but **Statement II** is incorrect
 - (4) **Statement I** is incorrect but **Statement II** is correct

- Options**
- 1. 1
 - 2. 2
 - 3. 3
 - 4. 4

Question Type : **MCQ**
Question ID : **87827025075**
Option 1 ID : **87827098985**
Option 2 ID : **87827098986**
Option 3 ID : **87827098987**
Option 4 ID : **87827098988**
Status : **Answered**
Chosen Option : **3**

Q.98 Which of the following is not a palindromic subsequence of the string "ababcdabba" ?

- (1) abcba
- (2) abba
- (3) abbbba
- (4) adba

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024990**

Option 1 ID : **87827098645**

Option 2 ID : **87827098646**

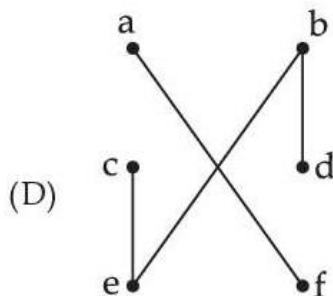
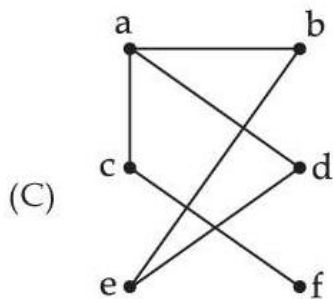
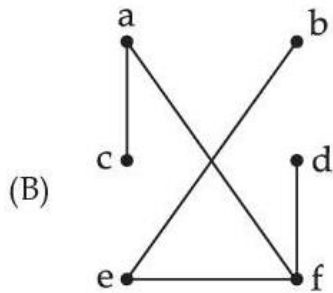
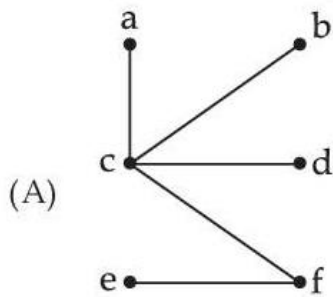
Option 3 ID : **87827098647**

Option 4 ID : **87827098648**

Status : **Answered**

Chosen Option : **4**

Q.99 Which of the following graphs are trees ?



Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
- (2) (A), (B) and (D) Only
- (3) (A) and (D) Only
- (4) (A), (B), (C) and (D) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025046**

Option 1 ID : **87827098869**

Option 2 ID : **87827098870**

Option 3 ID : **87827098871**

Option 4 ID : **87827098872**

Status : **Answered**
Chosen Option : **2**

Q.100 Given below are two statements :

Statement (I) : In Reuse Oriented Model, Modification of the old system parts appropriate to the new requirements.

Statement (II) : In Reuse Oriented Model, Integration of the modified parts are not possible into the new systems.

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **87827025077**
Option 1 ID : **87827098993**
Option 2 ID : **87827098994**
Option 3 ID : **87827098995**
Option 4 ID : **87827098996**
Status : **Answered**
Chosen Option : **3**

Q.101 Match List - I with List - II.

List - I

- (A) LRU
- (B) Demand cleaning
- (C) Long term scheduling
- (D) Medium term scheduling

List - II

- (I) A page is written to secondary memory only when it has been selected for replacement
- (II) A page that has not been referenced for the longest time is replaced
- (III) The decision to add to the number of processes that are partially or fully in main memory
- (IV) The decision to add to the pool of processes to be executed

Choose the **correct** answer from the options given below :

- (1) (A)-(I), (B)-(III), (C)-(IV), (D)-(II)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)
- (4) (A)-(IV), (B)-(II), (C)-(III), (D)-(I)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **87827025058**
Option 1 ID : **87827098917**
Option 2 ID : **87827098918**
Option 3 ID : **87827098919**
Option 4 ID : **87827098920**
Status : **Answered**
Chosen Option : **2**

Q.102 Consider a Grammar $E \rightarrow E+n | E \times n | n$ for a sentence $n+n \times n$, the handles in the right-sentential form of the reduction are ?

- (1) $n, E+n$ and $E+n \times n$
- (2) $n, E+n$ and $E+E \times n$
- (3) $n, n+n$ and $n+n \times n$
- (4) $n, E+n$ and $E \times n$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025012**

Option 1 ID : **87827098733**

Option 2 ID : **87827098734**

Option 3 ID : **87827098735**

Option 4 ID : **87827098736**

Status : **Answered**

Chosen Option : 1

Q.103 A program that is used by other routines to accomplish a particular task, is called :

- (1) Micro program
- (2) Micro operation
- (3) Routine
- (4) Subroutine

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024996**

Option 1 ID : **87827098669**

Option 2 ID : **87827098670**

Option 3 ID : **87827098671**

Option 4 ID : **87827098672**

Status : **Answered**

Chosen Option : 2

Q.104 Arrange the following steps in the correct sequence for applying an unsupervised learning technique such as K-means clustering is to a data set :

- (A) Randomly initialize cluster centroids
- (B) Assign each data point to nearest cluster centroid
- (C) Update the cluster centroids based on the mean of data points assigned to each cluster
- (D) Specify the number of clusters (K) to partition the data into
- (E) Repeat steps B and C until convergence criteria are met

Choose the **correct** answer from the options given below :

- (1) (D), (A), (B), (C), (E)
- (2) (A), (B), (C), (D), (E)
- (3) (C), (B), (A), (D), (E)
- (4) (D), (C), (A), (B), (E)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025073**

Option 1 ID : **87827098977**

Option 2 ID : **87827098978**

Option 3 ID : **87827098979**

Option 4 ID : **87827098980**

Status : **Answered**

Chosen Option : **4**

Q.105 Which of the following(s) are main memory ?

- (A) Virtual memory
- (B) Cache memory
- (C) RAM
- (D) SSD

Choose the **correct** answer from the options given below :

- (1) (A) and (C) Only
- (2) (B) and (C) Only
- (3) (C) and (D) Only
- (4) (A), (B) and (C) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025033**

Option 1 ID : **87827098817**

Option 2 ID : **87827098818**

Option 3 ID : **87827098819**

Option 4 ID : **87827098820**

Status : **Answered**

Chosen Option : **2**

Q.106 A _____ point of fuzzy set A is a point $x \in X$ at which $\mu_A(x) = 0.5$

- (1) Core
- (2) Support
- (3) Crossover
- (4) α - cut

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025026**

Option 1 ID : **87827098789**

Option 2 ID : **87827098790**

Option 3 ID : **87827098791**

Option 4 ID : **87827098792**

Status : **Answered**

Chosen Option : **4**

Q.107 Given as 4 GB ($\approx 4.3 \times 10^9$ bytes) of virtual space and typical page size of 4 KB and each page table entry is 5 bytes. How many virtual pages would this imply ? What is the size of whole page table ?

- (1) 107500 and 20480 bytes
- (2) 215000 and 40960 bytes
- (3) 10750 and 10240 bytes
- (4) 43000 and 1024 bytes

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025006**

Option 1 ID : **87827098709**

Option 2 ID : **87827098710**

Option 3 ID : **87827098711**

Option 4 ID : **87827098712**

Status : **Answered**

Chosen Option : **2**

Q.108 Which of the following statement/s is/are NOT CORRECT ?

- (A) OSPF is based on distance-vector routing protocol.
- (B) Both link-state and distance-vector routing are based on the least cost goal.
- (C) BGP4 is based on the path-vector algorithm.
- (D) The three-node instability can be avoided using split horizon combined with poison reverse.
- (E) RIP is based on link state algorithm.

Choose the **correct** answer from the options given below :

- (1) (A), (D) and (E) Only
- (2) (A) and (B) Only
- (3) (B) and (C) Only
- (4) (B), (C) and (E) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025050**

Option 1 ID : **87827098885**

Option 2 ID : **87827098886**

Option 3 ID : **87827098887**

Option 4 ID : **87827098888**

Status : **Answered**

Chosen Option : **1**

Q.109 Consider the three points $P_1(1, 2, 0)$, $P_2(3, 6, 20)$ and $P_3(2, 4, 6)$ and a view point $C(0, 0, -10)$.

Choose the correct options.

- (A) P_1 obscure P_2 , if viewed from C .
- (B) P_2 obscure P_1 , if viewed from C .
- (C) P_3 does not obscure P_1 , if viewed from C .
- (D) P_2 does not obscure P_3 , if viewed from C .

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (C) Only
- (2) (A), (C) and (D) Only
- (3) (B), (C) and (D) Only
- (4) (A), (B) and (D) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025035**

Option 1 ID : **87827098825**

Option 2 ID : **87827098826**

Option 3 ID : **87827098827**

Option 4 ID : **87827098828**

Status : **Answered**

Chosen Option : **2**

Q.110 Match List - I with List - II.

List - I

- (A) Hill climbing
- (B) Best first search
- (C) A* Search
- (D) Depth first search

List - II

- (I) $O(b^d)$
- (II) $O(bd)$
- (III) $O(1)$
- (IV) $O(b^m)$

Choose the **correct** answer from the options given below :

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (3) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (4) (A)-(I), (B)-(III), (C)-(II), (D)-(I)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025063**

Option 1 ID : **87827098937**

Option 2 ID : **87827098938**

Option 3 ID : **87827098939**

Option 4 ID : **87827098940**

Status : **Answered**

Chosen Option : 1

Q.111 Arrange the following levels of interrupt protection within the Linux Kernel, in the order of increasing priority.

- (A) user mode programs
- (B) bottom half interrupt handlers
- (C) kernel system service routines
- (D) top half interrupt handlers

Choose the **correct** answer from the options given below :

- (1) (A), (B), (D), (C)
- (2) (A), (C), (B), (D)
- (3) (A), (C), (D), (B)
- (4) (D), (A), (C), (B)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025068**

Option 1 ID : **87827098957**

Option 2 ID : **87827098958**

Option 3 ID : **87827098959**

Option 4 ID : **87827098960**

Status : **Answered**

Chosen Option : 3

Q.112 Given below are two statements :

Statement (I) : In datagram networks - routers hold state information about connections

Statement (II) : In virtual circuit network- each virtual circuit requires router table space per connection

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025078**

Option 1 ID : **87827098997**

Option 2 ID : **87827098998**

Option 3 ID : **87827098999**

Option 4 ID : **87827099000**

Status : **Answered**

Chosen Option : **4**

Q.113 A system bus in which each data item is transferred during a time slice known in advance to both units source and destination is called :

- (1) MIMD
- (2) DMA
- (3) asynchronous bus
- (4) synchronous bus

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025003**

Option 1 ID : **87827098697**

Option 2 ID : **87827098698**

Option 3 ID : **87827098699**

Option 4 ID : **87827098700**

Status : **Answered**

Chosen Option : **4**

Q.114 Which of the following is TRUE ?

- (1) The cost of searching an AVL tree is $\theta(\log n)$ but that of binary search is $O(n)$
- (2) The cost of searching an AVL tree is $\theta(\log n)$ but that of complete binary tree is $\theta(n \log n)$
- (3) The cost of searching a binary tree is $O(\log n)$ but that of AVL tree is $\theta(n)$
- (4) The cost of searching an AVL tree is $\theta(n \log n)$ but that of binary search tree is $O(n)$

Options

1. 1
2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827024991**

Option 1 ID : **87827098649**

Option 2 ID : **87827098650**

Option 3 ID : **87827098651**

Option 4 ID : **87827098652**

Status : **Answered**

Chosen Option : **3**

Q.115 The head of a moving head disk with 200 tracks, numbered 0 to 199, has just finished a request at track 125, and currently serving a request at track 143. The queue of requests is given in the FIFO order as 86, 147, 91, 177, 94, 150, 102, 175, 130. What will be the total number of head movements required to satisfy these requests for SCAN algorithm ?

- (1) 259 cylinders
- (2) 169 cylinders
- (3) 154 cylinders
- (4) 264 cylinders

Options

1. 1
2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025005**

Option 1 ID : **87827098705**

Option 2 ID : **87827098706**

Option 3 ID : **87827098707**

Option 4 ID : **87827098708**

Status : **Answered**

Chosen Option : **4**

Q.116 Which of the following symbol table implementation is best suited if access time is to be minimum ?

- (1) Linear list
- (2) Search tree
- (3) Hash Table
- (4) Self organisation list

Options

1. 1
2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025011**

Option 1 ID : **87827098729**

Option 2 ID : **87827098730**

Option 3 ID : **87827098731**

Option 4 ID : **87827098732**

Status : **Answered**

Chosen Option : **3**

Q.117 Which of the following circuit is used to store one bit of data ?

- (1) Encoder
- (2) Decoder
- (3) Flip-Flop
- (4) Register

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827024993**

Option 1 ID : **87827098657**

Option 2 ID : **87827098658**

Option 3 ID : **87827098659**

Option 4 ID : **87827098660**

Status : **Answered**

Chosen Option : **4**

Q.118 In most general case, the computer needs to process each instruction with the following sequence of steps :

- (A) Calculate the effective address
- (B) Execute the instruction
- (C) Fetch the instruction from memory
- (D) Fetch the operand from memory
- (E) Decode the instruction

Choose the **correct** answer from the options given below :

- (1) (A), (B), (C), (D), (E)
- (2) (A), (B), (C), (E), (D)
- (3) (C), (E), (A), (D), (B)
- (4) (C), (E), (D), (A), (B)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025065**

Option 1 ID : **87827098945**

Option 2 ID : **87827098946**

Option 3 ID : **87827098947**

Option 4 ID : **87827098948**

Status : **Answered**

Chosen Option : **4**

Q.119 Match List - I with List - II.

- | List - I | List - II |
|-----------------|----------------------------------|
| (A) SZA | (I) Increment M and skip it zero |
| (B) SKI | (II) Skip if AC is negative |
| (C) SNA | (III) Skip if input flag is on |
| (D) ISZ | (IV) Skip if AC is Zero |

Choose the **correct** answer from the options given below :

- (1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (3) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)
- (4) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025055**

Option 1 ID : **87827098905**

Option 2 ID : **87827098906**

Option 3 ID : **87827098907**

Option 4 ID : **87827098908**

Status : **Answered**

Chosen Option : **2**

Q.120 The average time required to search a storage location in memory and obtain its contents is called :

- (1) Access time
- (2) Latency time
- (3) Response time
- (4) Reading time

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025017**

Option 1 ID : **87827098753**

Option 2 ID : **87827098754**

Option 3 ID : **87827098755**

Option 4 ID : **87827098756**

Status : **Answered**

Chosen Option : **3**

Q.121 The microoperation which divides a signed binary number by 2 is :

- (1) Circular shift
- (2) Logical shift
- (3) Arithmetic shift right
- (4) Arithmetic shift left

Options

1. 1
2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827024995**

Option 1 ID : **87827098665**

Option 2 ID : **87827098666**

Option 3 ID : **87827098667**

Option 4 ID : **87827098668**

Status : **Answered**

Chosen Option : **2**

Q.122 The statement $P(x) : "x = x^2"$. If the universe of discourse consists of integers, what are the following have truth values :

- (A) $P(0)$
- (B) $P(1)$
- (C) $P(2)$
- (D) $\exists x P(x)$
- (E) $\forall x P(x)$

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (E) Only
- (2) (A), (B) and (C) Only
- (3) (A), (B) and (D) Only
- (4) (B), (C) and (D) Only

Options

1. 1
2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025044**

Option 1 ID : **87827098861**

Option 2 ID : **87827098862**

Option 3 ID : **87827098863**

Option 4 ID : **87827098864**

Status : **Answered**

Chosen Option : **4**

Q.123 Let $A=\{a, b\}$ and $L=A^*$. Let $x=\{a^n b^n, n>0\}$. The languages $L \cup X$ and X are respectively :

- (1) Not regular, Regular
- (2) Regular, Regular
- (3) Regular, Not regular
- (4) Not Regular, Not Regular

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025010**

Option 1 ID : **87827098725**

Option 2 ID : **87827098726**

Option 3 ID : **87827098727**

Option 4 ID : **87827098728**

Status : **Answered**

Chosen Option : **4**

Q.124 The sum of minimum and maximum number of final states for a Deterministic Finite Automata (DFA) having 'P' state is equal to :

- (1) p
- (2) p - 1
- (3) p + 1
- (4) p + 2

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025019**

Option 1 ID : **87827098761**

Option 2 ID : **87827098762**

Option 3 ID : **87827098763**

Option 4 ID : **87827098764**

Status : **Answered**

Chosen Option : **3**

Q.125 Has functions are used to produce the message digests which are then encrypted with a private key to get :

- (1) Public key
- (2) Digital signature
- (3) Cipher text
- (4) Data Encryption Standard

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025008**

Option 1 ID : **87827098717**

Option 2 ID : **87827098718**

Option 3 ID : **87827098719**

Option 4 ID : **87827098720**

Status : **Answered**

Chosen Option : **2**

- Q.126 Test suite is consist of :
- (1) Set of defect cases
 - (2) Set of boundary cases
 - (3) Set of test cases
 - (4) Set of nest cases

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **87827025020**
Option 1 ID : **87827098765**
Option 2 ID : **87827098766**
Option 3 ID : **87827098767**
Option 4 ID : **87827098768**
Status : **Answered**
Chosen Option : **2**

- Q.127 The work done by UDP is/are :
- (A) Congestion control
 - (B) Flow control
 - (C) Retransmission
 - (D) Segments transmission
- Choose the **correct** answer from the options given below :
- (1) (A) and (D) Only
 - (2) (C) Only
 - (3) (D) Only
 - (4) (B) and (C) Only

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**
Question ID : **87827025049**
Option 1 ID : **87827098881**
Option 2 ID : **87827098882**
Option 3 ID : **87827098883**
Option 4 ID : **87827098884**
Status : **Answered**
Chosen Option : **4**

Q.128 Match List - I with List - II.

List - I

List - II

- | | |
|-----------------------------------|---------------------------|
| (A) $\phi \cap \{\phi\} =$ | (I) ϕ |
| (B) $\{\phi\} \cap \{\phi\} =$ | (II) $\{\phi\}$ |
| (C) $\{\phi, \{\phi\}\} - \phi =$ | (III) $\{\{\phi\}\}$ |
| (D) $\phi \cup \{\{\phi\}\} =$ | (IV) $\{\phi, \{\phi\}\}$ |

Choose the **correct** answer from the options given below :

- (1) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (2) (A)-(II), (B)-(I), (C)-(III), (D)-(IV)
- (3) (A)-(II), (B)-(I), (C)-(IV), (D)-(III)
- (4) (A)-(I), (B)-(II), (C)-(IV), (D)-(III)

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025054**

Option 1 ID : **87827098901**

Option 2 ID : **87827098902**

Option 3 ID : **87827098903**

Option 4 ID : **87827098904**

Status : **Answered**

Chosen Option : **3**

Q.129 Which of the statement is/are CORRECT ?

- (A) Moore and Mealy machines are finite state machines with output capabilities.
- (B) Any given Moore machine has an equivalent Mealy machine.
- (C) Any given Mealy machine has an equivalent Moore machine.
- (D) Moore machine is not a finite state machine.

Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
- (2) (A), (B) and (C) Only
- (3) (B) and (D) Only
- (4) (A), (B) and (D) Only

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025043**

Option 1 ID : **87827098857**

Option 2 ID : **87827098858**

Option 3 ID : **87827098859**

Option 4 ID : **87827098860**

Status : **Answered**

Chosen Option : **1**

Q.130 What is the probability that a positive integer selected at random from the set of positive integer not exceeding 100 is divisible by either 2 or 5 ?

- (1) 10/5
- (2) 3/5
- (3) 2/5
- (4) 1/5

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827024989**

Option 1 ID : **87827098641**

Option 2 ID : **87827098642**

Option 3 ID : **87827098643**

Option 4 ID : **87827098644**

Status : **Answered**

Chosen Option : **2**

Q.131 Which of the following statements is TRUE ?

- (1) Virtual functions do not implement polymorphism
- (2) Virtual functions do not permit calling of derived class functions using a base class pointer
- (3) We can never build an object from a class containing a pure virtual function
- (4) Pure virtual functions can never have a body

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827024998**

Option 1 ID : **87827098677**

Option 2 ID : **87827098678**

Option 3 ID : **87827098679**

Option 4 ID : **87827098680**

Status : **Answered**

Chosen Option : **4**

Q.132 Match List - I with List - II.

List - I

- (A) Greedy Best first search
- (B) A*
- (C) Recursive best first search
- (D) SMA*

List - II

- (I) The space complexity as $O(d)$ where d = depth of the deepest optimal solution
- (II) Incomplete even if the search space is finite
- (III) Optimal if optimal solution is reachable otherwise return the best reachable optimal solution
- (IV) Computation and space complexity is two light

Choose the **correct** answer from the options given below :

- (1) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)
- (2) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)
- (3) (A)-(III), (B)-(II), (C)-(IV), (D)-(I)
- (4) (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025061**

Option 1 ID : **87827098929**

Option 2 ID : **87827098930**

Option 3 ID : **87827098931**

Option 4 ID : **87827098932**

Status : **Answered**

Chosen Option : **4**

Q.133

An Address in main memory is called :

- (1) Virtual address
- (2) Memory address
- (3) Logical address
- (4) Physical address

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025002**

Option 1 ID : **87827098693**

Option 2 ID : **87827098694**

Option 3 ID : **87827098695**

Option 4 ID : **87827098696**

Status : **Answered**

Chosen Option : **4**

Q.134 What is the generic structure of Multi Agent System (MAS) ?

- (1) Single agent with multiple objectives
- (2) Multiagents with a single objectives
- (3) Multiagents with diverse objectives and communication abilities
- (4) Multiagent with two objectives

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025025**

Option 1 ID : **87827098785**

Option 2 ID : **87827098786**

Option 3 ID : **87827098787**

Option 4 ID : **87827098788**

Status : **Answered**

Chosen Option : **3**

Q.135 Given below are two statements :

Statement (I) : A thread is a dispatchable unit of work that does not executes sequentially and is not interruptible

Statement (II) : It is not possible to alter the behaviour of a thread by altering its context when thread is suspended

In the light of the above statements, choose the **most appropriate answer** from the options given below :

- (1) Both **Statement I** and **Statement II** are correct
- (2) Both **Statement I** and **Statement II** are incorrect
- (3) **Statement I** is correct but **Statement II** is incorrect
- (4) **Statement I** is incorrect but **Statement II** is correct

Options 1. 1

2. 2
3. 3
4. 4

Question Type : **MCQ**

Question ID : **87827025076**

Option 1 ID : **87827098989**

Option 2 ID : **87827098990**

Option 3 ID : **87827098991**

Option 4 ID : **87827098992**

Status : **Answered**

Chosen Option : **4**

Q.136 Identify the code sequence :

1010

1011

1001

1000

(1) BCD

(2) Excess-3

(3) Gray

(4) Excess-3 gray

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827024994**

Option 1 ID : **87827098661**

Option 2 ID : **87827098662**

Option 3 ID : **87827098663**

Option 4 ID : **87827098664**

Status : **Answered**

Chosen Option : **3**

Q.137 Which of the following statement are truth statements if universe of disclosure is set of integers :

(A) $\forall n(n^2 \geq 0)$

(B) $\exists n(n^2 = 2)$

(C) $\forall n(n^2 \geq n)$

(D) $\exists n(n^2 < 0)$

Choose the **correct** answer from the options given below :

(1) (A) and (B) Only

(2) (B) and (C) Only

(3) (C) and (D) Only

(4) (A) and (C) Only

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025045**

Option 1 ID : **87827098865**

Option 2 ID : **87827098866**

Option 3 ID : **87827098867**

Option 4 ID : **87827098868**

Status : **Answered**

Chosen Option : **2**

Q.138 The steps for analysis and design of object oriented system.

- (A) Draw interaction diagrams
- (B) Draw state chart and object diagram
- (C) Draw use case and activity diagram
- (D) Draw component and deployment diagram
- (E) Draw class diagram

Choose the **correct** answer from the options given below :

- (1) (E)→(B)→(A)→(C)→(D)
- (2) (B)→(A)→(E)→(D)→(C)
- (3) (E)→(C)→(B)→(D)→(A)
- (4) (C)→(A)→(E)→(B)→(D)

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025067**

Option 1 ID : **87827098953**

Option 2 ID : **87827098954**

Option 3 ID : **87827098955**

Option 4 ID : **87827098956**

Status : **Answered**

Chosen Option : **2**

Q.139 Which of the following statement/s are CORRECT ?

- (A) NRZ is a bipolar scheme in which the positive voltage define bit is 0 (zero).
- (B) NRZ-L and NRZ-I both have an average signal rate of N/2.
- (C) The idea of RZ and NRZ-L are combined into Manchester scheme.
- (D) NRZ-L and NRZ-I both have DC component problems.
- (E) The minimum bandwidth of Manchester and differential Manchester is 3 times that of NRZ.

Choose the **correct** answer from the options given below :

- (1) (A), (B) and (C) Only
- (2) (A), (C), (D) and (E) Only
- (3) (B), (C) and (D) Only
- (4) (A), (B), (C) and (E) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025051**

Option 1 ID : **87827098889**

Option 2 ID : **87827098890**

Option 3 ID : **87827098891**

Option 4 ID : **87827098892**

Status : **Answered**

Chosen Option : **2**

Q.140 Three address codes can be represented in special structures known as :

- (A) Quadruples
- (B) Triples
- (C) Patterns
- (D) Indirect Triples

Choose the **correct** answer from the options given below :

- (1) (A) and (B) Only
- (2) (A), (B) and (D) Only
- (3) (B) and (C) Only
- (4) (B), (C) and (D) Only

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025042**

Option 1 ID : **87827098853**

Option 2 ID : **87827098854**

Option 3 ID : **87827098855**

Option 4 ID : **87827098856**

Status : **Answered**

Chosen Option : **1**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 141

Q.141 The minimum cost of food is :

- (1) 205
- (2) 250
- (3) 330
- (4) 200

Options 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**

Question ID : **87827025084**

Option 1 ID : **87827099017**

Option 2 ID : **87827099018**

Option 3 ID : **87827099019**

Option 4 ID : **87827099020**

Status : **Answered**

Chosen Option : **1**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 142

Q.142 Which of the following are quantities (in grams) of food X and Y respectively when the cost of food is minimum :

- (1) 0 and $12\frac{1}{2}$
- (2) 15 and $\frac{5}{4}$
- (3) $\frac{120}{7}$ and 0
- (4) 0 and 10

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025082**

Option 1 ID : **87827099009**

Option 2 ID : **87827099010**

Option 3 ID : **87827099011**

Option 4 ID : **87827099012**

Status : **Answered**

Chosen Option : **2**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 143

Q.143

The cost function of total food is :

(1) $Z = 6x + 7y$

(2) $Z = 8x + 12y$

(3) $Z = 12x + 20y$

(4) $Z = 20x + 12y$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025080**Option 1 ID : **87827099001**Option 2 ID : **87827099002**Option 3 ID : **87827099003**Option 4 ID : **87827099004**Status : **Answered**Chosen Option : **2**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 144

Q.144

The dual of the formulated LPP is :

(1) $\text{Max } Z = 100u + 120v$

s.t.

$$6u + 7v \leq 12$$

$$8u + 12v \leq 20$$

$$u, v \geq 0$$

(2) $\text{Max } Z = 12u + 20u$

s.t.

$$6u + 7v \leq 100$$

$$8u + 12v \leq 120$$

$$u, v \geq 0$$

(3) $\text{Max } Z = 100u + 120v$

s.t.

$$6u + 7u \leq 12$$

$$8u + 7v \leq 20$$

$$u, v \text{ are unrestricted}$$

(4) $\text{Max } Z = 100u + 120u$

s.t.

$$6u + 7v \geq 12$$

$$8u + 12v \geq 20$$

$$u, v \geq 0$$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025083**

Option 1 ID : **87827099013**

Option 2 ID : **87827099014**

Option 3 ID : **87827099015**

Option 4 ID : **87827099016**

Status : **Answered**

Chosen Option : **3**

Comprehension:

Food X contains 6 units of Vitamin D per gram and 7 units of Vitamin E per gram and cost is Rs 12 per gram. Food Y contains 8 units of vitamin D per gram and 12 units of Vitamin E per gram and cost is Rs 20 per gram. The daily minimum requirements of vitamin D and E are 100 units and 120 units respectively.

Suppose x is quantity (in gram) of food X, y is quantity (in gram) of food Y.

Answering the following question based on the above paragraph given.

SubQuestion No : 145

Q.145 Which of the following constrains when formulating the LPP ?

- (1) $6x + 7y \leq 100, 8x + 12y \leq 120, x, y \geq 0$
- (2) $6x + 8y \leq 100, 7x + 12y \leq 120, x, y \geq 0$
- (3) $6x + 7y \geq 100, 8x + 12y \geq 120, x, y \geq 0$
- (4) $6x + 8y \geq 100, 7x + 12y \geq 120, x, y \geq 0$

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**

Question ID : **87827025081**

Option 1 ID : **87827099005**

Option 2 ID : **87827099006**

Option 3 ID : **87827099007**

Option 4 ID : **87827099008**

Status : **Answered**

Chosen Option : 1

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 146**Q.146**

Find the number of tuples by applying the operation $X \bowtie_{x.s=y.s} Y$

- (1) 1
- (2) 3
- (3) 4
- (4) 6

Options

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**Question ID : **87827025086**Option 1 ID : **87827099021**Option 2 ID : **87827099022**Option 3 ID : **87827099023**Option 4 ID : **87827099024**Status : **Answered**Chosen Option : **2**

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 147

Q.147

Result of $X \bowtie_{X.S=Y.S} Y$ is :

(1)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
T	4	G	Null	Null

(2)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
A	Null	Null	H ₁	MD

(3)

S	Si	C	P	D
J	1	M	S ₁	CA
B	2	N	P ₁	AB
R	3	H	D ₁	DC
T	4	G	Null	MD
A	Null	Null	H ₁	Null

(4) None of these

Options 1. 1

2. 2

3. 3

4. 4

Question Type : MCQ

Question ID : 87827025087

Option 1 ID : 87827099025
 Option 2 ID : 87827099026
 Option 3 ID : 87827099027
 Option 4 ID : 87827099028
 Status : Answered
 Chosen Option : 2

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 148

Q.148 Number of tuples by applying right outer join on relation X and Y is/are :

- (1) 16
- (2) 5
- (3) 3
- (4) 4

Options

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Type : MCQ
 Question ID : 87827025089
 Option 1 ID : 87827099033
 Option 2 ID : 87827099034
 Option 3 ID : 87827099035
 Option 4 ID : 87827099036
 Status : Answered
 Chosen Option : 3

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 149

Q.149 Which of the following join is used to get all the tuples of relation X and Y with Null values of corresponding missing values ?

- (1) Left outer join
- (2) Right outer join
- (3) Natural join
- (4) Full outer join

Options 1. 1

2. 2

3. 3

4. 4

Question Type : **MCQ**Question ID : **87827025088**Option 1 ID : **87827099029**Option 2 ID : **87827099030**Option 3 ID : **87827099031**Option 4 ID : **87827099032**Status : **Answered**Chosen Option : **3**

Comprehension:

Consider the following relations X (S, Si, C) and Y (S, P, D).

X

S	Si	C
J	1	M
B	2	N
R	3	H
T	4	G

Y

S	P	D
J	S ₁	CA
B	P ₁	AB
R	D ₁	DC
A	H ₁	MD

SubQuestion No : 150

Q.150 Number of tuples obtained by applying cartesian product over X and Y are :

- (1) 16
- (2) 12
- (3) 04
- (4) 32

Options

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Type : **MCQ**Question ID : **87827025090**Option 1 ID : **87827099037**Option 2 ID : **87827099038**Option 3 ID : **87827099039**Option 4 ID : **87827099040**Status : **Answered**Chosen Option : **2**

NATIONAL TESTING AGENCY**UGC NET December 2023 - Final Answer Keys on which the result compiled**

Exam Date : 07.12.2023

Shift : 2

Subject : 087 - COMPUTER SCIENCE AND APPLICATIONS

Ques. ID	Correct Option	Ques. ID	Correct Option	Ques. ID	Correct Option	Ques. ID	Correct Option
87827024938	2	87827024980	3	87827025023	4	87827025065	3
87827024939	4	87827024981	4	87827025024	3	87827025066	2
87827024940	2	87827024982	1	87827025025	3	87827025067	4
87827024941	3	87827024984	4	87827025026	3	87827025068	2
87827024942	2	87827024985	3	87827025027	4	87827025069	3
87827024943	2	87827024986	3	87827025028	1	87827025070	3
87827024944	2	87827024987	3	87827025029	4	87827025071	3
87827024945	3	87827024988	3	87827025030	2	87827025072	4
87827024946	2	87827024989	2	87827025031	4	87827025073	1
87827024947	3	87827024990	4	87827025032	3	87827025074	3
87827024948	4	87827024991	1	87827025033	2	87827025075	1
87827024949	4	87827024992	Dropped	87827025034	3	87827025076	2
87827024950	2	87827024993	3	87827025035	2	87827025077	3
87827024951	2	87827024994	3	87827025036	2	87827025078	4
87827024952	3	87827024995	2	87827025037	2	87827025080	3
87827024953	3	87827024996	4	87827025038	2	87827025081	4
87827024954	4	87827024997	2	87827025039	4	87827025082	2
87827024955	3	87827024998	3	87827025040	4	87827025083	1
87827024956	1	87827024999	3	87827025041	3	87827025084	1
87827024957	2	87827025000	4	87827025042	2	87827025086	3
87827024958	3	87827025001	3	87827025043	2	87827025087	2
87827024959	1	87827025002	4	87827025044	3	87827025088	4
87827024960	3	87827025003	4	87827025045	4	87827025089	4
87827024961	4	87827025004	2	87827025046	1	87827025090	1
87827024962	2	87827025005	2	87827025047	2		
87827024963	1	87827025006	Dropped	87827025048	3		
87827024964	3	87827025007	3	87827025049	3		
87827024965	4	87827025008	2	87827025050	1		
87827024966	3	87827025009	3	87827025051	3		
87827024967	2	87827025010	3	87827025052	3		
87827024968	4	87827025011	3	87827025053	3		
87827024969	1	87827025012	4	87827025054	4		
87827024970	4	87827025013	2	87827025055	2		
87827024971	2	87827025014	3	87827025056	3		
87827024972	3	87827025015	4	87827025057	2		
87827024973	3	87827025016	4	87827025058	2		
87827024974	3	87827025017	1	87827025059	2		
87827024975	1	87827025018	3	87827025060	2		
87827024976	4	87827025019	3	87827025061	1		
87827024977	3	87827025020	3	87827025062	1		
87827024978	2	87827025021	3	87827025063	1		
87827024979	1	87827025022	3	87827025064	3		