Coded Inequalities Questions

Question 1:

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In this question, there are three statements showing the relation, which follow the three i, ii and iii. Believing the statement as true, find out which findings are completely true.

Statement: A ≤ B < S; S = E> N; N > C = T

Conclusion:

i) B < N

ii) E > T

iii) A < C

1. I only) and ii)
2. Only ii) and iii)
3. Only ii)
4. All are rational

Answer (Detailed Solution Below)

Option 3 : Only ii)

Coded Inequalities Question 1 Detailed Solution

Statements: A ≤ B < S; S = E > N; N > C = T

After combining the statements, we get: A ≤ B < S = E > N > C = T

Conclusions:

i) B < N → Does not follow as (B < S = E > N, therefore there is not definite relation can be concluded between B and N).

ii) E > T → **Follows** as (E > N > C = T, therefore E > T).

iii) A < C → This does not follow as (A ≤ B and N > C, but there is no direct link between A and C to establish this comparison directly).

So, **Only Conclusion II** follows.

Hence, the correct answer is ***'Option 3'.***

Question 2:

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Comprehension:

Direction: Study the given information and answer which conclusion definitely follows:

P @ Q means P is neither less nor equal to Q.

P # Q means P is neither greater nor equal to Q.

P $ Q means P is neither less nor greater than Q.

P & Q means P is not greater than Q.

P % Q means P is not less than Q.

Statement: Y # X & Z # N; X % R $ T @ W

Conclusions:

I) N @ W

II) T % Y

III) Z % R

1. Only conclusion I is true.
2. Only conclusion II is true.
3. Both conclusion I and III is true.
4. All are true
5. None is true

Answer (Detailed Solution Below)

Option 3 : Both conclusion I and III is true.

Coded Inequalities Question 2 Detailed Solution

Given:

P is	@	#	$	&	%	to Q
	>	<	=	≤	≥	

Now,

Statements: Y # X & Z # N; X % R $ T @ W

Y < X ≤ Z < N; X ≥ R = T > W

Y < X ≥ R = T > W

N > Z ≥ X ≥ R = T > W

Conclusions:

I) N @ W → N > W → It is given that N > Z ≥ X ≥ R = T > W. As we can see that N is greater than W, this conclusion **follows**.

II) T % Y → T ≥ Y → It is given that Y < X ≥ R = T. As there is no direct relation between Y and T, this conclusion also **doesn't follow**.

III) Z % R → Z ≥ R → It is given that Z ≥ X ≥ R. As we can see that Z is greater than or equal to R, this conclusion also **follows**.

Hence, the correct answer is **Only conclusion I and III is true.**

Question 3:

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Comprehension:

Direction: Study the given information and answer which conclusion definitely follows:

P @ Q means P is neither less nor equal to Q.

P # Q means P is neither greater nor equal to Q.

P $ Q means P is neither less nor greater than Q.

P & Q means P is not greater than Q.

P % Q means P is not less than Q.

Statements: M @ L $ Y $ C # V & O; S @ N @ Y & G

Conclusions:

I) V # G

II) S @ C

III) O % M

1. Only conclusion I is true.

2. Only conclusion II is true.

3. Both conclusion I and II is true.

4. All are true

5. None is true

Answer (Detailed Solution Below)

Option 2 : Only conclusion II is true.

Coded Inequalities Question 3 Detailed Solution

Given:

P is	@	#	$	&	%	to Q
	>	<	=	≤	≥	

Now,

Statements: M @ L $ Y $ C # V & O; S @ N @ Y & G

M > L = Y = C < V ≤ O; S > N > Y ≤ G

M > L = Y = C ≤ G ; M > L = Y = C < N < S ; S > N > Y = C < V ≤ O

G ≥ Y = C < V ≤ O

Conclusions:

I) V # G → V < G → It is given that G ≥ Y = C < V. As there is no direct relation between V and G, this conclusion **doesn't follow**.

II) S @ C → S > C → It is given that S > N > Y = C. As we can see that S is greater than C, this conclusion **follows**.

III) O % M → O ≥ M → It is given that M > L = Y = C < V ≤ O. As there is no direct relation between O and M, this conclusion also **doesn't follow**.

The correct answer is **Only conclusion II is true.**

Question 4:

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Comprehension:

Direction: Study the given information and answer which conclusion definitely follows:

P @ Q means P is neither less nor equal to Q.

P # Q means P is neither greater nor equal to Q.

P $ Q means P is neither less nor greater than Q.

P & Q means P is not greater than Q.

P % Q means P is not less than Q.

Statements: T # N @ M & H # D; M $ L # Z; N % V @ C

Conclusions:

I) N % Z

II) H @ C

III) V # D

1. Only conclusion I is true.

2. Only conclusion II is true.

3. Both conclusion I and II is true.

4. All are true

5. None is true

Answer (Detailed Solution Below)

Option 5 : None is true

Coded Inequalities Question 4 Detailed Solution

Given:

P is	@	#	$	&	%	to Q
	>	<	=	≤	≥	

Now,

Statements: T # N @ M & H # D; M $ L # Z; N % V @ C

T < N > M ≤ H < D; M = L < Z; N ≥ V > C

T < N > M = L < Z

T < N ≥ V > C

H > D ≥ M = L < Z

C < V ≤ N > M ≤ H < D

Conclusions:

I) N % Z → N ≥ Z → It is given that N > M = L < Z. As there is no direct relation between N and Z, this conclusion **doesn't follow**.

II) H @ C → H > C → It is given that C < V ≤ N > M ≤ H. As there is no direct relation between H and C, this conclusion also **doesn't follow**.

III) V # D → V < D → It is given that V ≤ N > M ≤ H < D. As there is no direct relation between V and D, this conclusion also **doesn't follow**.

Hence, the correct answer is **None is true**.

Question 5:

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Consider the following:

I. A + B means A is neither smaller nor equal to B

II. A - B means A is not greater than B.

III. A × B means A is not smaller than B.

IV. A ÷ B means A is neither greater nor equal to B.

V. A ± B means A is neither smaller nor greater than B.

Statement: P × Q, P - T, T ÷ R, R ± S

Conclusion-1: Q ± T

Conclusion-2: S + Q

Which one of the following is correct in respect of the above Statement and the Conclusions?

1. Only Conclusion-1 follows from the Statement.
2. Only Conclusion-2 follows from the Statement.
3. Both Conclusion-1 and Conclusion-2 follow from the Statement.
4. Neither Conclusion-1 nor Conclusion-2 follows from the Statement.

Answer (Detailed Solution Below)

Option 2 : Only Conclusion-2 follows from the Statement.

Coded Inequalities Question 5 Detailed Solution

The Correct answer is **Option 2.**

Key Points

According to the question,
A + B means A > B
A – B means A ≤ B
A × B means A ≥ B
A ÷ B means A < B
A ± B means A = B
It's given that, P × Q, P – T, T ÷ R, R ± S
Or P ≥ Q, P ≤ T, T < R, R = S
Using this we get: S = R > T ≥ P ≥ Q
Conclusion I: Q ± T or Q = T. This is not necessarily true.
Conclusion II: S + Q or S > Q. This is true.
Hence, option (b) is correct.

Question 6

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Comprehension:

Direction: In the following questions, the symbols *, #, %, & and $ are used with the following meaning as illustrated below:

'X * Y' means 'X is neither less than nor greater than Y'.

'X # Y' means 'X is either greater than or equal to Y'.

'X % Y' means 'X is less than Y'.

'X & Y' means 'X is neither less than nor equal to Y'.

'X $ Y' means 'X is not greater than Y'.

Now in each of the following questions assuming the given statements to be True, find which of the conclusion/s given below them is/are definitely True?

Statements:

A % B, C & D, F * E # C, D % A

Conclusions:

I. D % B

II. E & A

III. F & D

1. Only Conclusion I is True.
2. Only Conclusion II is True.
3. Only Conclusion III is True.
4. Both Conclusions I and III are True.

5. Both Conclusions II and III are True.

Answer (Detailed Solution Below)

Option 4 : Both Conclusions I and III are True.

Coded Inequalities Question 6 Detailed Solution

According to the given information,

X is					
Symbol	*	#	%	&	$
Meaning	=	≥	<	>	≤
to Y					

Given Statements: A % B, C & D, F * E # C, D % A

On converting: A < B, C > D, F = E ≥ C, D < A

On combining: F = E ≥ C > D < A < B

Conclusions:

I. D % B → D < B → True (as D < A < B→ D < B)

II. E & A → E > A → False (as E ≥ C > D < A → E > D < A → thus clear relation between E and A can't be determined)

III. F & D → F > D → True (as F = E ≥ C > D → F ≥ C > D → F > D)

Hence, both conclusions I and III are true.

Question 7

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Comprehension:

Direction: In the following questions, the symbols *, #, %, & and $ are used with the following meaning as illustrated below:

'X * Y' means 'X is neither less than nor greater than Y'.

'X # Y' means 'X is either greater than or equal to Y'.

'X % Y' means 'X is less than Y'.

'X & Y' means 'X is neither less than nor equal to Y'.

'X $ Y' means 'X is not greater than Y'.

Now in each of the following questions assuming the given statements to be True, find which of the conclusion/s given below them is/are definitely True?

Statements

Q & P, Y * U, D % P, Y # D

Conclusions:

I. U * D

II. D $ U

III. D & U

1. Only Conclusion I is True.
2. Only Conclusion II is True.
3. Both Conclusions I and II are True.
4. Either Conclusion I or II is True.
5. Either Conclusion I or III is True.

Answer (Detailed Solution Below)

Option 2 : Only Conclusion II is True.

Coded Inequalities Question 7 Detailed Solution

According to the given information,

X is					
Symbol	*	#	%	&	$
Meaning	=	≥	<	>	≤
to Y					

Statement: Q & P, Y * U, D % P, Y # D

On converting: Q > P, Y = U, D < P, Y ≥ D

On combining: Q > P > D ≤ Y = U

Conclusions:

I. U * D → U = D → False (as D ≤ Y = U → D ≤ U)

II. D $ U → D ≤ U → True (as D ≤ Y = U → D ≤ U)

III. D & U → D > U → False (as D ≤ Y = U → D ≤ U)

Hence, **Only conclusion II is true.**