

# CODED INEQUALITY WORKSHEET

PLUTUS ACADEMY

# Question (1-5)

In the following questions, the symbols @, ©, \$, % and \* are used with the following meaning as illustrated below:

'P © Q' means 'P is not smaller than Q'.

'P \* Q' means 'P is not greater than Q'.

'P @ Q' means 'P is neither greater than nor equal to Q'.

'P \$ Q' means 'P is neither smaller than nor equal to Q'.

'P % Q' means 'P is neither greater than nor smaller than Q'. Now in each of the following question assuming the given statements to be true, find which of the conclusions given below them is/are definitely true and give your answer accordingly.

# Question 1

**Statements:** J \$ K, K \* T, T @ N, N © R

**Conclusions:**

I. J \$ T    II. R \* T

III. N \$ K    IV. R \* K

(a) None is true.

(b) Only I is true.

(c) Only II is true.

(d) Only III is true.

(e) Only IV is true.

PLUTUS ACADEMY

## Question 2

**Statements :** F % W, W © R, R @ M, M \$ D

**Conclusions :**

I.D @ R    II.M \$ F

III.R @ D    IV.R \* F

- (a) None is true.
- (b) Only I is true.
- (c) Only II is true.
- (d) Only IV is true.
- (e) Only III is true.

PLUTUS ACADEMY

# Question 3

Statements : H @ B, B \* E, V © E, W \$ V

Conclusions :

I. W \$ E    II. H @ E

III. H @ V    IV. W \$ B

(a) None is true.

(b) Only I is true.

(c) Only II is true.

(d) Only IV is true.

(e) Only III is true.

PLUTUS ACADEMY

# Question 4

**Statements :**  $R \odot K$ ,  $K * N$ ,  $N \$ J$ ,  $J \% H$

**Conclusions:**

I.  $R \$ N$       II.  $J @ K$

III.  $H @ N$     IV.  $R \$ H$

- (a) None is true.
- (b) Only I is true.
- (c) Only II is true.
- (d) Only IV is true.
- (e) Only III is true.

PLUTUS ACADEMY

# Question 5

**Statements :**  $K * D$ ,  $D \$ N$ ,  $N \% M$ ,  $M © W$

**Conclusions :**

I.  $M @ K$     II.  $N @ K$

III.  $M @ D$     IV.  $W * N$

- (a) Only I and II are true.
- (b) Only I, II and III are true.
- (c) Only III and IV are true.
- (d) All I, II, III and IV are true.
- (e) None of these.

PLUTUS ACADEMY

# Question (6-10)

In these questions, symbols \$, \*, #, % and @ are used with different meaning as follows:

'A \$ B' means 'A is not smaller than B'.

'A \* B' means 'A' is greater than B'.

'A # B' means 'A' is not greater than B'.

'A %B' means 'A' is smaller than B'.

'A @ B' means 'A is neither smaller than nor greater than B.'

Now in each of the following question assuming the given statements to be true, find which of the conclusions given below them is/are definitely true and give your answer accordingly.



# Question 6

**Statements :**  $M * T$ ,  $D \% T$ ,  $D \# K$

**Conclusions :** I.  $M * D$  II.  $T \# K$

- (a) If only conclusion I is true.
- (b) If only conclusion II is true.
- (c) If either conclusion I or II is true.
- (d) If neither conclusion I nor II is true.
- (e) If both conclusions I and II are true

PLUTUS ACADEMY

# Question 7

**Statements :**  $F @ R$ ,  $R \$ J$ ,  $V \% J$

**Conclusions :** I.  $F * V$     II.  $R * V$

- (a) If only conclusion I is true.
- (b) If only conclusion II is true.
- (c) If either conclusion I or II is true.
- (d) If neither conclusion I nor II is true.
- (e) If both conclusions I and II are true.

PLUTUS ACADEMY

# Question 8

**Statements** :  $L \$ W, W * H, H \# T$

**Conclusions** : I.  $T @ L$  II.  $H \% L$

- (a) If only conclusion I is true.
- (b) If only conclusion II is true.
- (c) If either conclusion I or II is true.
- (d) If neither conclusion I nor II is true.
- (e) If both conclusions I and II are true.

PLUTUS ACADEMY

# Question 9

**Statements :**  $J \# Q$ ,  $Q * D$ ,  $D \% P$

**Conclusions :** I.  $P \# Q$  II.  $P * Q$

- (a) If only conclusion I is true.
- (b) If only conclusion II is true.
- (c) If either conclusion I or II is true.
- (d) If neither conclusion I nor II is true.
- (e) If both conclusions I and II are true

PLUTUS ACADEMY

# Question 10

**Statements :**  $N @ J$ ,  $J \# G$ ,  $G \% P$

**Conclusions :** I.  $N \# G$  II.  $J \# P$

- (a) If only conclusion I is true.
- (b) If only conclusion II is true.
- (c) If either conclusion I or II is true.
- (d) If neither conclusion I nor II is true.
- (e) If both conclusions I and II are true.

PLUTUS ACADEMY

# Question 11

In which of the given expression does the expression  $F < N$  and  $R > M$  definitely hold true?

a)  $M \leq N < L$ ;  $R > N$ ;  $P < F \leq L$

b)  $M \leq N > L$ ;  $R < N$ ;  $P < F \geq L$

c)  $M \leq N > L$ ;  $R > N$ ;  $P < F \leq L$

d)  $M \leq N > L$ ;  $R < N$ ;  $P < F \geq L$

e)  $M \geq N > L$ ;  $R > N$ ;  $P < F \leq L$

PLUTUS ACADEMY

## Question 12

In which of the given expression does the expression  $N > Q$  and  $L > P$  definitely hold True?

a)  $L > M \geq N < O = P \leq Q < R$

b)  $L > M \geq N > O = P \leq Q < R$

c)  $L > M \geq N > O = P \geq Q < R$

d)  $L > M \geq N \leq O = P \leq Q < R$

e)  $L \geq M \geq N \geq O = P \geq Q < R$

PLUTUS ACADEMY

# Question 13

What is in the place of question mark (?) in the given expression does the expression  $S > Y$  is definitely true and  $X \geq V$  is definitely false?

$$S \geq T > X = U ? Y \geq V > Z$$

a)  $\geq$

b)  $>$  or  $=$

c)  $>$

d)  $=$

e)  $<$

PLUTUS ACADEMY



## Question 14

If the expression  $D < A > C = F \geq G$  is definitely true, which of the following would be definitely true?

- a)  $G < C$
- b)  $D = C$
- c)  $G < A$
- d)  $F \leq A$
- e)  $D \leq F$

PLUTUS ACADEMY

## Question 15

Which of the following expression is definitely false, if the given expression is true

$$"V = W > X \leq Y = Z"$$

- a)  $V > X$
- b)  $Y \geq X$
- c)  $Y \geq W$
- d)  $Z \geq X$
- e) None of these

PLUTUS ACADEMY

## Question(16-20)

In the following questions, the symbols  $\alpha$ ,  $\beta$ ,  $\$$ ,  $\#$ ,  $\bar{\delta}$  are used with the following meanings.

$A \alpha B$  means 'A is not smaller than B'.

$A \beta B$  means 'A is neither greater than nor smaller than B'.

$A \$ B$  means 'A is not greater than B'.

$A \# B$  means 'A is neither smaller than nor equal to B'.

$A \bar{\delta} B$  means 'A is neither greater than nor equal to B'.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true.

16). Statements:  $K \alpha H$ ,  $E \# F$ ,  $K \beta F$

Conclusions: I.  $E \# H$  II.  $H \delta F$

- 1) if only conclusion I is true.
- 2) if only conclusion II is true.
- 3) if either conclusion I or II is true.
- 4) if neither conclusion I nor II is true.
- 5) if both conclusions I and II are true.

**Q.17 Statements: B # D, L δ M, M \$ N, D # N**

**Conclusions: I.D # M II.B # L**

- 1) if only conclusion I is true.
- 2) if only conclusion II is true.
- 3) if either conclusion I or II is true.
- 4) if neither conclusion I nor II is true.
- 5) if both conclusions I and II are true.

**Q18 Statements:  $W \beta Z, R \alpha W, Z \alpha M$**

**Conclusions: I.  $R \beta M$  II.  $R \neq M$**

- 1) if only conclusion I is true.
- 2) if only conclusion II is true.
- 3) if either conclusion I or II is true.
- 4) if neither conclusion I nor II is true.
- 5) if both conclusions I and II are true.

**Q19 Statements:  $M \alpha N, H \$ Q, Q \alpha M$**

**Conclusions: I.H  $\beta$  M II.Q  $\beta$  N**

- 1) if only conclusion I is true.
- 2) if only conclusion II is true.
- 3) if either conclusion I or II is true.
- 4) if neither conclusion I nor II is true.
- 5) if both conclusions I and II are true.

**Q20 Statements:  $L \# T, V \beta L, T \$ W$**

**Conclusions: I.V  $\# W$  II.T  $\beta W$**

- 1) if only conclusion I is true.
- 2) if only conclusion II is true.
- 3) if either conclusion I or II is true.
- 4) if neither conclusion I nor II is true.
- 5) if both conclusions I and II are true.



1. (d) 2. (d) 3. (d) 4. (e) 5. (c) 6. (a) 7. (e) 8. (b) 9. (c) 10. (a) 11.(c) 12(c) 13(c)  
14(c) 15(e) 16(a) 17(e) 18(c) 19(d) 20(d)

PLUTUS ACADEMY