**UNIVERSITY OF ENGINEERING & MANAGEMENT**

**SDP MATERIAL**

**Logical Reasoning.**

**SET -1(Practice set)**

**Directions (Q. 1-5): In each question below are given three statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.**

**1.Statements:**

**All flowers are roses.**

**No rose is a lily.**

**Some lily are plants.**

**Conclusions:**

**I.    All roses being flowers is a possibility.**

**II.  All plants being lily is a possibility.**

**III. Some lily are not roses.**

a.Only I and III follow

b.All, I, and II follow

c.Only III follows

d.All follows

e.None of these

**2.Statements:**

**All trees are branches.**

**Some branches are seeds.**

**No fruit is a tree.**

**Conclusions:**

**I.   Some branches are not fruits.**

**II.  Some seeds are branches.**

**III. Some seeds being trees is a possibility.**

a.Only I and II follow

b.Only III follows

c.Only II follows

d.Only II and III follow

e.All follow

**3.Statements:**

**No fan is a AC**

**No AC is a cooler.**

**All lights are coolers.**

**Conclusions:**

**I.  No fan is a cooler.**

**II. No AC is a light.**

**III.No cooler is a AC.**

a.Only I and II follow

b.Only II follows

c.Only II and III follow

d.Only III follow

e.None of these

**4.Statements:**

**Some school are colleges.**

**All colleges are universities.**

**Some classes are school.**

**Conclusions:**

**I.   Some classes are colleges.**

**II.  Some universities are colleges.**

**III. At least some classes are universities**.

a.Only II follow

b.Only II and III follow

c.Only III follow

d.All follow

e.None of these

**5.Statements:**

**All red are blue**

**All blue are yellow**

**No green is yellow**

**conclusions:**

**I.   All yellow being red is a possibility**

**II.  some blue are yellow**

**III. NO red is green**

a.only III follow

b.only II and III

c.only I,II and III

d.I and II

e.none of these

**Directions (Q 6-10): In the given questions, assuming the given statements to be true, find Which of the given four conclusions numbered I, II, III and IV is/are definitely true and give your answer accordingly.**

**6.Statements:**

**A≥W,B>Q,W<T=R,Q=V<A**

**Conclusions:**

**I. B>A          II. B>V**

**III. A≥R          IV. W>V**

a.Only I is true

b.Only II is true

c.Only II and IV are true

d.Only I and III are true

e.None of these

**7.Statements:**

**V<R=A≤Q;T<R**

**Conclusions:**

**I.  V<Q        II. Q>T**

a.Both conclusions I and II are true

b.Either conclusion I or II is true

c.Neither conclusion I not II is true

d.Only conclusion I is true

e.Only conclusion II is true

**8.Statements:**

**C>E≥ M, Q > K ≥ C, L = H < Q**

**Conclusions:**

**I. C≥L          II. K>M**

**III. Q>E         IV. L≥K**

a.Only III and IV are true

b.Only I, II and IV are true

c.Only II and III are true

d.Only II is true

e. None of these

**9.Statements:**

**Q≥Z>A,N=A<C,T≥L>Q**

**Conclusions:**

**I. T>Z         II. Q>N**

**III. C≥L      IV. T>A**

a.Only I and III are true

b.Only II and IV are true

c.Only II and III are true

d.Only I, II and IV are true

e.None of these

**10.Statements:**

**N>A≥B=Q≤P<J≤Z; Z≥A>X**

**Conclusions:**

**I. B<Z      II. X≥J**

a.Both conclusions I and II are true

b.Either conclusion I or II is true

c.Only conclusion I is true

d.Neither conclusion I nor II is true

e.Only conclusion II is true

**New Pattern:**

In each of the questions/set of questions below are given two statements followed by two conclusions numbered I and II. You have to assume everything in the statements to be true even i f they seem to be at variance from commonly known facts and then decide which of the two given conclusions logically follows from the information given in the statement. Give answer

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**1. Statements:**

 All rings are circles.

All squares are rings.

No ellipse is a circle.

**Conclusions:**

 I. Some rings being ellipses is a

possibility.

II. At least some circles are squares.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**2. Statements:**

 No house is an apartment.

Some bungalows are apartments.

**Conclusions:**

 I. No house is a bungalow.

II. All bungalows are houses.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**3. Statements:**

 Some gases are liquids.

All liquids are water.

**Conclusions:**

 I. All gases being water is a possibility.

II. All such gases which are not water can

never be liquids.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**4. Statements:**

 All minutes are seconds.

All seconds are hours.

No second is a day.

**Conclusions:**

I. No day is an hour.

II. At least some hours are minutes.

**(5-6): Statements:**

Some teachers are professors.

Some lecturers are teachers.

**5. Conclusions:**

 I. All teachers as well as professors being

lecturers is a possibility.

II. All those teachers who are lecturers are

also professors.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**6. Conclusions:**

I. No professor is a lecturer.

II. All lecturers being professors is a

possibility.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**7. Statements:**

 Some squares are circles.

Some circles are rectangles.

**Conclusions:**

 I. At least some rectangles are squares.

II. No rectangle is a square.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**8. Statements:**

 No office is a palace.

All colleges are palaces.

**Conclusions:**

 I. All palaces are colleges.

II. No college is an office.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**9. Statements:**

 All mountains are rivers.

All rivers are lakes.

**Conclusions:**

I. All mountains are lakes.

II. At least some lakes are rivers.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.

**10. Statements:**

 Some wins are losses.

All trophies are losses.

**Conclusions:**

 I. All trophies are wins.

II. All losses are trophies.

1) if only conclusion I follows.

2) if only conclusion II follows.

3) if either conclusion I or conclusion II follows.

4) if neither conelusion I nor conclusion II follows.

5) if both conclusions I and II follow.