## **Ch-6 Lines and Angles**

- 1. Two angles are called adjacent angles, if
  - a. they have the same vertex,
  - b. they have a common arm, and
  - c. uncommon arms are on either side of the common arm.
- 2. Two adjacent angles are said to form a linear pair of angles, if their non-common arms are two opposite rays.
- 3. The sum of all the angles round a point is equal to 360°.
- 4. If two lines intersect, then the vertically opposite angles are equal.
- 5. A line which intersects two or more given lines at distinct points, is called a **transversal** of the lines.
- 6. Two angles on the same side of a transversal are known as **corresponding angles**, if both lie either above the two lines or below the two lines.
- 7. The pairs of interior angles on the same side of the transversal are called **consecutive** interior angles.
- 8. If a transversal intersects two parallel lines, then each pair of **corresponding angles** are equal.
- 9. If a transversal intersects two parallel lines, then each pair of alternate interior angles are equal.
- 10. If a transversal intersects two parallel lines, then each pair of **consecutive interior angles** are supplementary.
- 11. **Reflex angle** An angle whose measure is more than 180° but less than 360°, is called reflex angle.
- 12. The sum of angles forming a linear-pair is 180°.
- 13. **Supplementary Angles** If the sum of two angles is 180°, these angles are called supplementary angles.
- 14. Complementary Angles If the sum of two angles is 90°, then these angles are called complementary angles.