CHAPTER-6 (LINES AND ANGLES)

WORKSHEET (STANDARD)

TIME- 45 Min   MAX. MARKS: 20

Choose the correct option: $(2 \times 1 = 2)$

1.If l,m,n are lines in the same plane such that l intersect m and n, then l and n are:

(a) parallel (b) Intersecting (c) Always perpendicular (d) Always intersecting at 60°.

2.If two interior angles on the same sides of a transversal intersecting two parallel lines are in the ratio 2:3 ,then the smaller of the two angles is :

(a) 72° (b) 65°   (c) 54°   (d) 36°

Fill in the blanks: $(2 \times 1 = 2)$

1.An angle is equal to two third of its compliment then angle is equal to _____.

2.Each interior angle of a regular polygon with n number of sides given by _____.

Answer the following: ($2 \times 1 = 2$)

1.If the angles of the triangle are in the ratio 2:3:4,find the three angles.

2. Two unequal angles of a parallelogram are in the ratio 2:3. Find all its angles in degrees

SHORT ANSWER TYPE-I ($2 \times 2 = 4$)

1. It is given that ∠POR=3x and ∠QOR=2x+10°. If POQ is a straight line, then find the value of x.

2. The supplement of an angle is one-third of itself. Determine the angle and its supplement.

SHORT ANSWER TYPE-II ($2 \times 3 = 6$)

1.If the bisector of a pair of corresponding angles formed by transversal with two parallel lines,prove that the bisectors are parallel.

2. Prove that the straight lines perpendicular to the same straight line are parallel to one another.

LONG ANSWER TYPE: ($1 \times 4 = 4$)

1. The side QR of triangle PQR is produced to points.If the bisectors of ∠PQR and ∠PRS meet at point T, then prove that ∠QTR =$\frac{1}{2}$∠QPR.