Q.5. A MOTOR CYCLIST DRIVES HIS MOTORCYCLE IN A GLOBE OF 4M DIAMETER. THE DIAMETER OF THE MOTORCYCLEWHEEL IS 80 CM. DRAW THE LOCUS OF A POINT ON THE CIRCUMFERENCE OF THE WHEEL FOR 1 REVOLUTION OF THE WHEEL. ALSO DRAW THE LOCUS OF THE POINT IF MOTOR CYCLIST DRIVES IN THE WALL OF A WELL OF THE DIAMETER SAME AS THAT OF GLOBE.

Q.6. A STRING IS COMPLETELY WOUND AROUND A CIRCUMFERENCE OF A SEMICIRCULAR CYLINDER OF 60 MM DIAMETER. HOLDING THE FREE END OF THE STRING SUCH THAT THE STRING IS ALL THE TIME HELD TAUT, IT IS UNWOUND COMPLETELY. TRACE THE PATH FOLLOWED BY FREE END.

Q.7. DRAW AN ARCHIMEDEAN SPIRAL FOR 1.5 CONVOLUTION. THE SPIRAL STARTS FROM THE POLE & ITS GREATEST RADIUS IS 70MM.

Q.8. CONSTRUCT A LOGARITHMIC SPIRAL OF 1 CONVOLUTION GIVEN THE LENGTH OF THE SHORTEST RADIUS AS 15MM & THE RATIO OF LENGTHS OF SUCCESSIVE RADIUS VECTORS ENCLOSING AN ANGLE 30° AS 9:8.

SHEET EDGE

MARGIN LINE