1031-03-32 **Shree Ram Gupta** (srguptajhs@yahoo.com), C/m-1/6 Virangna Nagar, Jhansi, U.P., India, and **Madhusuden Agrawal*** (madhusuden.agrawal@ansys.com), 80 Winona Cir, Lebanon, NH 03766. *Extension of Menalus theorem and cyclic quadrilateral theorem for any polygon in a generalized form.*

Authors has developed two theorems on polygon and cyclic polygon. Theorem on polygon is an extension of Menalus theorem. According to Menalus theorem - "If a transversal is drawn to cut the sides or sides produced of a triangle, the product of three alternate segments taken in order is equal to the product of the other three segments." Authors have generalized this theorem for a polygon - "If a transversal is drown to cut the sides or sides produced of a pentagon. The product of five alternate segments taken in order is equal to the product of the other five segments."

Another work of authors on cyclic polygon is an extension of cyclic quadrilateral theorem, which stats that "In a even sided cyclic polygon, the sum of interior alternative angles is equal to the sum of other interior alternate angles which is equal to (n-2) right angles where n is even number of sides. " (Received July 24, 2007)