

The natural frequencies of composite laminates plate with effect of various plate parameters have been studied using ANSYS5.4 program. Laminate composites are increasing used in various mechanical structures and industrial applications, due to their higher stiffness and higher strength-to-weight ratio. The effects of number of layers, angle of fiber orientation, boundary conditions, width to thickness ratio and laminate arrangement with the natural frequencies of plate having cutout at the center are studied. The non-dimensional fundamental frequency of vibration is found to increase with increase in width to thickness ratio and angle of fiber orientation. The natural frequencies of plate depend on size and shape of the cutout, with increasing values from the plate without cutout because the mass of the plate decrease. The effect of number of layers is found to be insignificant beyond four layers and the laminate arrangement show different results between symmetric and anti-symmetric laminate plate. Some of the results compared with M.K.Pandit et al. [2], that have various size of rectangular cutout at the center, with good agreement results