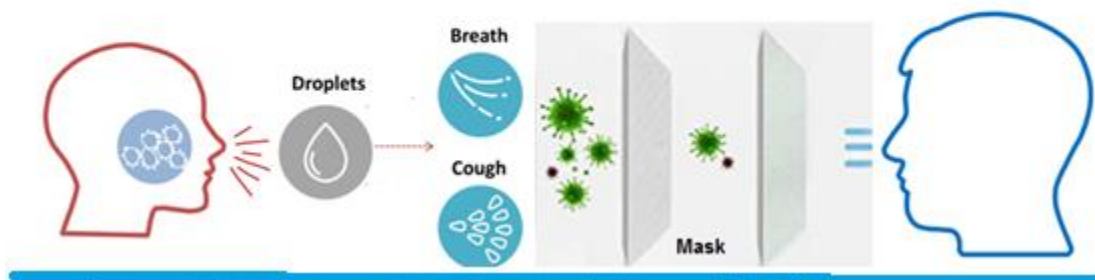


Coronavirus transmission



The teachers and staff of Maulana Azad National Institute of Technology have always been devoted for building the prosperous nation. They are also contributing in the fight against present CoVID-19 pandemics spread through the country. Recently some faculty and staff has developed homemade washable mask from cotton fabric. These masks are being distributed amongst the residents of MANIT Campus, security guards, sweepers, maintenance and horticulture staff, drivers and in-house venders. the institute has distributed these masks to the poor and needy people living in nearby slums. The main material of mask is cotton fabric that comforts the person from heat and sweat of the season. The thickness of fabric was critically chosen and used in double layer to block the tiny respiratory aerosol particles (fine droplets of sneez) which are of 8-12 micron. The triple/double pleats inserted horizontally in the mask spreads it to cover the vital parts of face. It also gives bulging narrow space near mouth and nostrils to speak and breathe comfortably. It is also proposed to increase the filtration efficiency by inserting thin layer/film of nanofibers of Polymer/TiO₂ nanocomposites between the two layers of cotton fabric. This will enhance antiperspirant and antibacterial activity of cotton fabric. Dr Fozia Z Haque (Physics Department), Prof Vinita Mohindra (Humanities and Social Sciences Department) and Dr Varsha Rokde (Management Studies Department) has initiated this work which is motivated by Prof Arvind Mittal (Dean Research & Consultancy) for social service. The whole team is thankful to the Director Prof N S Raghuwanshi for his constant support and encouragement.

