



## SUMMARY

Microscope is of crucial importance for observing microorganisms and understanding their structure. Microscopy provides valuable information about the functions of structures. Therefore it is important to understand how microscope works. Further there are various types of microscopes based on various principles such as light microscopes, phase contrast microscope, confocal microscope, dark field microscope, Scanning electron microscope, Transmission electron microscope etc. Among various microscopic techniques electron microscope have a much higher magnification than light microscopes and much higher resolution as a result, this allows us to see smaller specimens in greater detail. The resolution is able to be increased because as the electrons travel faster their wavelength becomes shorter so there is a direct correlation between reducing wavelength and increasing resolution. Thus electron microscopy is considered as most efficient type of microscopy. These are the most advanced types of microscopes used in modern science.