Q1/ Why do we need digital image processing? Q2/ What is the digital image? Q3/ What is digital image processing? Q4/ How the imaging machines advance our pictorial information? Q5/ What are the electromagnetic waves? Q6/ What is positron emission tomography (PET)? And how it works? **Q**7/ How the X-rays generated in the industrial fields? Q8/ What is the computerized axial tomography (CAT)? how it works? **Q**9/ In the equation f(x, y), what does f represent: a) Intensity b) Distortion c) Transparency Q10/ In the equation f(x, y), x represent the: a) Row index b) Column index Q11/ **True** or **False**, the Segmentation process is the process that enhance the features of the image? Q12/ In the image processing systems, why do we need a digitizer? Q13/ Mention 6 components in a general-purpose digital image processing system