

LMRT Digital Imaging

1. The smallest unit of a digital image is the _____.
2. The three-dimensional representation of a tissue volume element in imaging is called a _____.
3. The number of shades of gray a pixel can display is determined by its _____ depth.
4. The _____ is the total number of pixels arranged in rows and columns.
5. The ability of a digital imaging system to distinguish small differences in tissue densities is called _____ resolution.
6. The ability of a system to record fine detail is called _____ resolution.
7. The range of exposure values that can be accurately captured by a digital detector is called the _____ range.
8. _____ is the mathematical process used to adjust digital images, such as edge enhancement or smoothing.
9. The system used for storing, retrieving, and distributing digital images is called _____.
10. The universal standard for medical image formatting and transmission is called _____.
11. In computed radiography (CR), the imaging plate contains a _____ phosphor layer that stores the latent image.
12. In direct digital radiography (DR), x-ray photons are converted directly into an _____ signal.
13. Increasing the matrix size while keeping the field of view the same results in _____ spatial resolution.
14. The adjustment that controls the brightness of the image is the window _____.
15. The adjustment that controls the contrast of the image is the window _____.