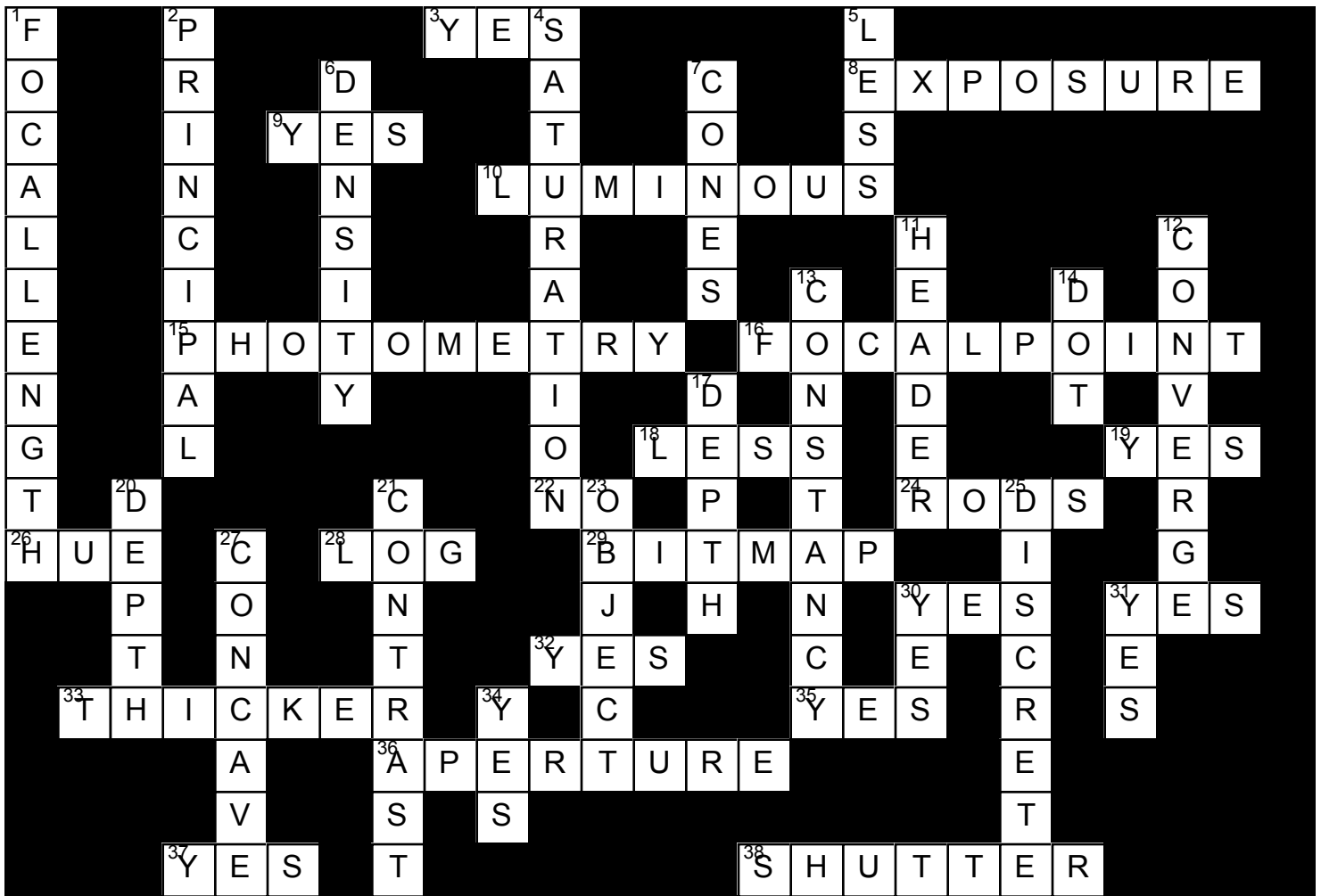


# Digital Imaging Systems

## Chapter 2



### Across

3. Indirect imaging system stores image in a film. (Yes/No) [YES]
8. The amount of light that enters the camera is called \_\_\_\_\_. [EXPOSURE]
9. Amplitude is relevant to image processing as it indicates brightness. (yes/No) [YES]
10. The amount of light energy per unit time is called \_\_\_\_\_ flux. [LUMINOUS]
15. The measurement of light is called \_\_\_\_\_. [PHOTOMETRY]
16. The point where the light converges is called \_\_\_\_\_. [FOCALPOINT]
18. Pixelation error is because of \_\_\_\_\_ pixels. (less/more) [LESS]
19. Light is part of EM radiation. (Yes/No) [YES]
22. Aliasing and Nyquist frequency concepts are not related. (Yes/No) [NO]
24. \_\_\_\_ is responsible for photopic vision. [RODS]
26. The dominant wavelength is called \_\_\_\_\_. [HUE]

### Down

1. The distance between the centre of the lens and focal point is \_\_\_\_\_ in ideal lens. [FOCALLENGTH]
2. The imaginary line that passes through the centre of lens is called \_\_\_\_\_ optical axis. [PRINCIPAL]
4. The purity of light is called \_\_\_\_\_. [SATURATION]
5. False contour effect is because of \_\_\_\_\_ bits on the image. (less/more) [LESS]
6. The number of pixels per unit length of the monitor is called pixel \_\_\_\_\_. [DENSITY]
7. \_\_\_\_ is responsible for scotopic vision. [CONES]
11. Image meta-data includes details about the image non-intensity data and stored in image \_\_\_\_\_. [HEADER]
12. A lens \_\_\_\_\_ or diverges light rays. [CONVERGE]

## Across

28. Actual intensity and perceived intensity are related by ----- function. [LOG]
29. 2D array of pixel intensity is called ----- in image storage. [BITMAP]
30. Flash assists in illumination of object. (Yes/No) [YES]
31. Replication is a zero-order process. (Yes/No) [YES]
32. Amplitude is a measure of the intensity of light. (Yes/No) [YES]
33. The lens is called ----- if its centre is thicker than the edges. [THICKER]
35. The difference in brightness perception of the background and foreground is called contrast. (Yes/No) [YES]
36. The size of the light opening is called \_\_\_\_\_. [APERTURE]
37. F-measure is the indication of light entering the camera. (Yes/No) [YES]
38. The time allowed to pass through the light is called \_\_\_\_\_ speed. [SHUTTER]

## Down

13. The ability to perceive colour same in all lighting conditions is called colour \_\_\_\_\_. [CONSTANCY]
14. Pixel size is also called as \_\_\_\_\_ pitch in monitors. [DOT]
17. The number of bits required to display all colours is called colour \_\_\_\_\_. [DEPTH]
20. The difference between the acceptable nearest and farthest point is called \_\_\_\_\_ of view. [DEPTH]
21. The ratio of the pixel value of the brightest and darkest area is called \_\_\_\_\_ ratio. [CONTRAST]
23. Magnification factor is the ratio of image size to \_\_\_\_\_ size. [OBJECT]
25. Sampling process converts an analog signal to a \_\_\_\_\_ signal. [DISCRETE]
27. The lens is called ----- if it spreads out light rays from the focal point. [CONCAVE]
30. Downsampling scales down the image by subsampling. (Yes/No) [YES]
31. Sampling rate should be at least twice the maximum frequency. (Yes/No) [YES]
34. Colour correction using white balance is called chromatic adaptation. (Yes/No) [YES]