

### **UNIT III IMAGE RESTORATION**

1. What is the real-world application of image subtraction?
  - a. MRI scan
  - b. CT scan
  - c. Mask mode radiography
  - d. None of the above
2. In geometric mean filters when alpha is equal to 1 then it works as a) notch filter b) bandpass filter c) wiener filter d) inverse filter
3. \_\_\_\_\_ filter is known as averaging filters. a) Bandpass b) Low pass c) High pass d) Notch
4. Gamma Correction is defined as \_\_\_\_\_ a) Light brightness variation b) A Power-law response phenomenon c) Inverted Intensity curve d) Brightness
5. PDF in image processing is called a) probability degraded function b) probability density function c) probabilistic degraded function d) probabilistic density function
6. Gaussian noise is referred to as A) red noise B) black noise C) white noise D) normal noise
7. The lower limit of the dynamic range ratio can be determined by
  - a. Brightness
  - b. Contrast
  - c. Saturation
  - d. Noise
8. In geometric mean filters when alpha is equal to 1 then it works as A) notch filter B) bandpass filter C) wiener filter D) inverse filter
9. Convolution in spatial domain is multiplication in a) frequency domain b) time domain c) spatial domain d) plane
10. Contraharmonic mean filter produces A) degraded image B) original image C) restored image D) plane
11. What is meant by the section of the real plane that the image coordinates have spanned?
  - a. Coordinate Axis
  - b. Plane of Symmetry
  - c. Spatial Domain
  - d. None of the above
12. Filter that replaces the pixel value with the medians of intensity levels is a) arithmetic mean filter b) geometric mean filter c) median filter d) sequence mean filter
13. In wiener filtering it is assumed that noise and image are a) different b) homogenous c) correlated d) uncorrelated
14. Name the procedure in which individual pixel values of the digital image get altered.
  - a. Neighborhood Operations
  - b. Image Registration
  - c. Geometric Spatial Transformation
  - d. Single Pixel Operation
15. What is the output of a smoothing, linear spatial filter?
  - a. Median of pixels
  - b. Maximum of pixels
  - c. Minimum of pixels
  - d. Average of pixels
16. Explain the various types of noise models.
17. Explain the various types of filters in image restoration.

18. What filter is used to remove salt and pepper noise? Explain
19. Which is the most frequent method to overcome the difficulty to formulate the spatial relocation of pixels? Explain
20. Explain the various order statistic filters.
21. Difference between Image Restoration with Image Enhancement
22. Why the restoration is called as unconstrained restoration?
23. Explain Inverse filter in detail
24. Explain Weiner filter in detail
25. Evaluate the working of adaptive filter and various types of mean filters in detail.
26. Identify image degradation and restoration processes to restore an old image and explain them with suitable examples
27. Interpret the concept of image restoration filters with relevant example.
28. Interpret the inverse filtering concept with relevant example.