

Dr Nitin Kumar

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- SEPTEMBER 2018

B.Tech VIIth Semester

COURSE CODE: 10B1WCI737

MAX. MARKS: 15

COURSE NAME: IMAGE PROCESSING TECHNIQUES

COURSE CREDITS: 03

MAX. TIME: 1 Hrs

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. Calculate the mega pixel of a camera having image dimension of 2500 X 3200. [1]
2. Calculate the size of an image with dimension 1920 X 1080 having 256 gray levels per pixel. [1]
3. Define the following: [3]
 - a. Image enhancement
 - b. Image restoration
 - c. Contrast and Dynamic range
4. Discuss the power law intensity transformation along with its application. [2]
5. Several noise models are used for image reconstruction. Mention any two commonly used models with their formulation and area of application. [2]
6. What effect does sampling and quantization have on the quality of an image? [2]
7. Compute the histogram of the following image. Perform histogram equalization on the same.

4	1	3	2
3	1	1	1
0	1	5	2
1	1	2	2

[1+3]