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**NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA**

(An Autonomous Institute)

Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Uttar Pradesh, Lucknow

**M.Tech**

**FIRST YEAR (SEMESTER-II) THEORY EXAMINATION (2020-2021)**

**(Subjective Type)**

**Subject Code: AMTCSE0213**

**Subject: Digital Image Processing**

**Max. Mks. : 30**

**Time : 50 Minutes**

**General Instructions:**

*All questions are compulsory.*

*Question No. 1 to 15 are subjective type question carrying 3 marks each. Attempt any 10 out of 15 questions.*

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty
1	Why do we need digital image processing?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
2	Define Resolutions with suitable example.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
3	Define sampling and quantization.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
4	What is gray level slicing? Explain with example.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
5	What is meant by masking? Write different type of mask with their structure.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
6	Explain histogram specification.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
7	What Is Image Transform? Explain it with any one algorithm.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
8	What is PCA? Explain in detail.&nbsp;		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant

Q.No	Question Content	Question Image	Category	Sub Category	Marks	Options Randomization	Type	Difficulty
9	What is meant by convolution? Explain its importance in digital image processing.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
10	Specify the steps involved in splitting and merging?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
11	What is Erosion? Explain it with example.		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
12	What is Hit-Miss transformation?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
13	What is the need for Image Compression?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
14	Define psycho visual redundancy?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant
15	What is Hue and saturation?		Attempt any 10 questions	10 x 3=30	3		Subjective	Brilliant