

B.TECH. SEM -VII BIO MEDICAL 2014 COURSE (CBCS) :
SUMMER - 2018
SUBJECT : IMAGE PROCESSING

Day : **Tuesday**
Date : **22/05/2018**

S-2018-2531

Time : **02.30 PM TO 05.30 PM**
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
 - 4) Assume suitable data, if necessary.
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Q. 1 Describe various steps in Digital Image Processing. (10)

OR

With reference to relation between pixels explain: (10)

- a) 4 connectivity b) 8 connectivity c) Mixed connectivity

Q. 2 Discuss spatial domain filtering and its applications in Image Processing. (10)

OR

Write note on: (10)

- a) Contrast stretching b) Gray level slicing c) Bit plane slicing.

Q. 3 What is Lossy and Lossless Compression? Explain the need and application of each. (10)

OR

Discuss Wavelet Transform and its applications. (10)

Q. 4 What are the different Morphological Algorithms? (10)

OR

Elaborate the concept of Digital Image Watermarking. (10)

Q. 5 What is Hough transform? Describe its types and application. (10)

OR

What are the Boundary Descriptors? Discuss its types. (10)

Q. 6 Discuss the various applications of Image Processing in Medical field. (10)

OR

What are the different pattern classification algorithms? Explain any one in detail. (10)

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