



AJEENKYA

D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School: School of Engineering

Program: M.Tech Bioengineering (BM)

Course: Advanced Medical Image Processing

Course Code: BEN602

Semester: III

Max Marks: 40

Duration (mins): 90

Answer any **FOUR** questions.

(Each question carries 10 marks).

[40]

Q.1 Following image has Salt and Pepper noise. Apply suitable filter to remove noise from the image.

0	1	3	2
4	5	2	7
6	2	4	2
7	5	8	1

Q.2 Explain smoothing in frequency domain filters.

Q.3 Apply region splitting in the following image .Assume threshold value ≤ 3 .

5	6	4	7	4	5	5	3
6	7	7	6	3	3	2	1
6	6	4	4	3	2	5	6
4	5	4	5	4	6	2	3
3	2	3	0	7	5	3	2
1	0	1	0	2	2	6	5
1	0	1	1	3	0	4	4
0	2	1	0	2	3	5	4

Q.4 What is color image processing? Explain in detail different types of color models.

Q.5 State the difference between time, frequency and wavelet domain in image processing.

Q.6 Explain the homomorphic filtering used in digital image processing.
