



Computer Sciences dep.
University of Technology



Date: 16 / 9 / 2016

Time: 3 hours

Lecturer: Dr. Matheel E.

Final examination 2016-2017

Subject: Machine vision

Class: Fourth

Branch: AI

NOTE: Answer five questions. Each question has 10 marks.

Q1:/ Draw the block diagram of image analysis and discuss each stage.

Q2:/ If you have the vectors $A=[2,7,10,15,9,5]$ and $B=[1,5,6,12,4,3]$. Find Euclidean distance, city block, and maximum value.

Q4:/ What is image quantization? What are its types? How can we reduce 8-bit information containing 256 possible gray-level values down to 64 possible values?

Q5:/ Choose two from the following:

What are the:

1. Image segmentation techniques.
2. Nonlinear local operators.
3. Binary object features.

Q6:/ Find the Sobel operator on the following sub image.

20	22	30	40	55
23	44	55	20	47
23	76	28	35	85
12	46	87	64	63
92	86	42	54	75

BEST WISHES

Dr. Matheel