German University in Cairo Media Engineering and Technology Assoc. Prof. Rimon Elias

DMET 901: Computer Vision Egyptian Licence Plates Regulation System Assignment 1

Guidelines:

- 1. The assignment is to be implemented **individually**.
- 2. Code: to be submitted in **one .cpp file**. Comment your code so that it is clear which function is answer to which question.
- 3. Report: containing answers to the questions in addition to required screenshots.
- 4. Submission: submit your assignment through the MET website.
- 5. **Deadline**: Thursday 20/10/2016, 11:59 pm. Late submissions will not be accepted

<u>Part 1:</u>

- 1. Load Image (L1.jpg) and convert it to binary using thresholding
- 2. Blend Images (L1.jpg) with resized image (logo.jpg) with a ratio 4:1
- 3. Load Image (L2.jpg) and adjust its brightness with a value of 50
- 4. Load Image (L3.jpg), implement affine transformation to get a front view of the plate (hint: you may **not** use OpenCV existing method)
- 5. Load Image (L4.jpg) and apply homography transformation to get a front view of the plate (Hint: you may use OpenCV existing method)