Islamic University of Almadinah Almunawwarah **Faculty of Computer and Information Systems**



Grade

Student's ID	Student's NAME

CCS 3085 2242 Digital Image Processing

Lab test #1

Write a MATLAB program to:

- Read an RGB image 'I' and display it in figure (1)
- Convert it into grayscale and save it into 'J'.
- Apply the histogram equalization for the image 'J' and save the results in 'K'.
- Display both images ('J' and 'K') and their corresponding histogram in a single figure (2). ('J' in position 1, histogram of 'J' in position 2; 'K' in position 3 and histogram of 'K' in position 4).
- Save image 'K' into a png file called 'image K.png'.

```
I = imread('tree.jpg');
figure(1);
imshow(I);
J = rgb2gray(I);
K = histeq(J);
figure(2);
subplot(2,3,1),imshow(J),title('J image');
subplot(2,3,2),imshow(hist(J)),title('J hist');
subplot(2,3,1),imshow(K),title('K image');
subplot(2,3,2),imshow(hist(K)),title('K hist');
imwrite(K,'image K.png');
```