1) What do you notice with increasing mask size?

As square averaging window size increasing it consider more neighbor pixels since it goes to blurrier.

2.A) What artefacts do you notice in the image obtained by computing the inverse DFT of the filtered image?

It lost some of because background pixels have high frequencies and image became some smooth because noise components also reduced due to lowpass filter.

2.B) compare the result of LPF and Gaussian?

Compared to Ideal low pass filter gaussian gave more smoother effect of removing high frequency components. We got even noise removed image.

3) Comment on the value of K that you obtained by step (a) and (b)?

As given windows as variations of Laplacian windows (second derivative) itself so performance of those windows and Laplacian almost similar compared to magnitude differences we got minimum for (a) part MSE at almost k nearly equal to 0.01 and (b) got k at 0.374