Q2)

●

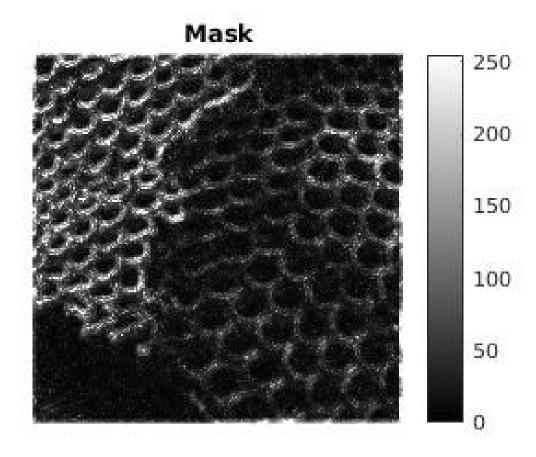● Mask:-

● Optimal Values:-

σ_{space} = 99

$\sigma_{intensity}$ = 27.72
RMSD = 5.1625
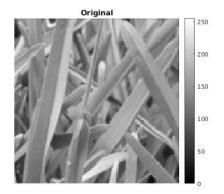
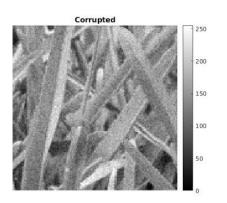● Values for different sigma:-

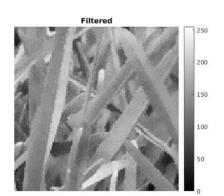| σ_{space}	$\sigma_{intensity}$	RMSD
99*0.9	27.72	5.1626

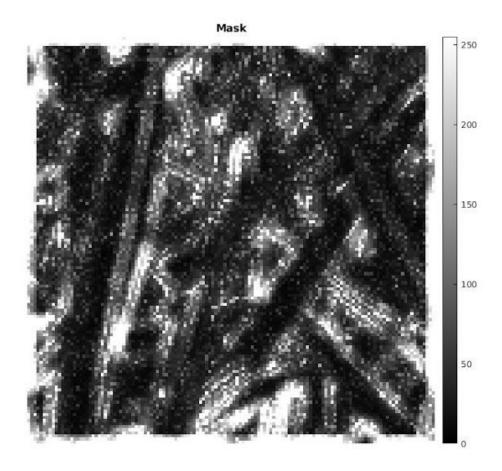| 99*1.1	27.72	5.1625
99	27.72*0.9	5.1866
99	27.72*1.1	5.1938

For grass:-

●

Original   Corrupted   Filtered

● Mask

Mask

● Optimal Values:-

σ_{space} = 90

$\sigma_{intensity}$ = 20

RMSD = 5.5661

- Values for different sigma:-

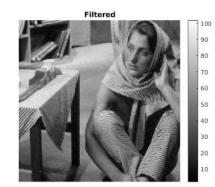| σ_{space}	$\sigma_{intensity}$	RMSD
90*0.9	20	5.5661
90*1.1	20	5.5659
90	20*0.9	5.6022
90	20*1.1	5.5710

For barbara:-

●

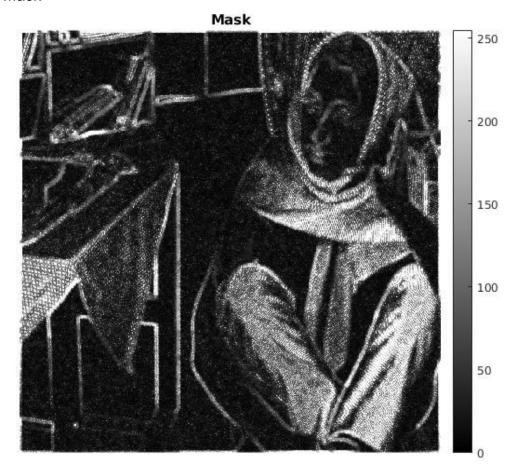
- Mask

- Optimal Values:-

  σ_{space} = 90

  $\sigma_{intensity}$ = 8.60
  RMSD = 2.3890

- Values for different sigma:-

σ_{space}	$\sigma_{intensity}$	RMSD
90*0.9	8.6	2.3890
90*1.1	8.6	2.3890
90	8.6*0.9	2.4088
90	8.6*1.1	2.3954