

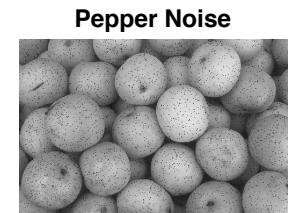
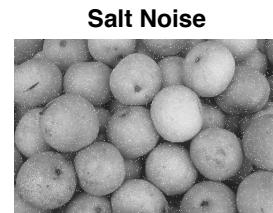
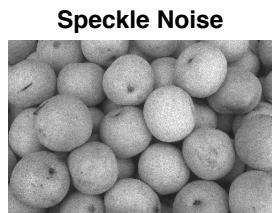
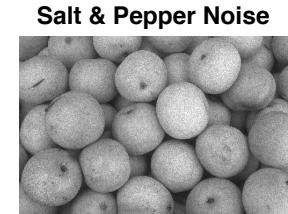
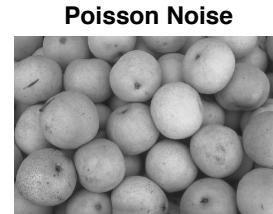
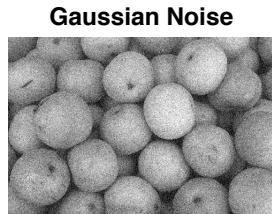
Question 1:

Contraharmonic with -ve sign increases pepper noise in the image.
Contraharmonic with +ve sign increases salt noise in the image.

Question 2:

Because Median filter is an order filter and it smooths out salt and pepper noise as this noise is due to outliers and median filter removes outliers.

Task1:



Task2:

Arithematic:

Impact on Gaussian



Impact on Poisson Noise



Impact on Salt & Pepper Noise



Impact on Speckle Noise



Impact on Salt Noise



Impact on Pepper Noise



Geometric:

Gaussian



Poisson



Salt & Pepper



Poisson



Poisson



Poisson



Harmonic Mean:

Harmonic Gaussian Mean Filter



Poisson Filter



Salt & Pepper Filter



Speckle Filter



Salt Filter



Pepper Filter



ContraHarmonic with -1

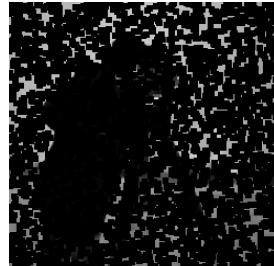
Contra Harmonic -1 Gaussian Filter



Poisson Filter



Salt & Pepper Filter



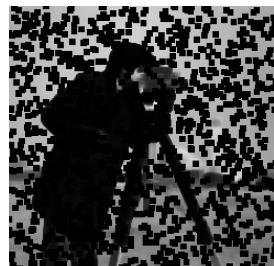
Speckle Filter



Salt Filter



Pepper Filter



Contra Harmonic +1:

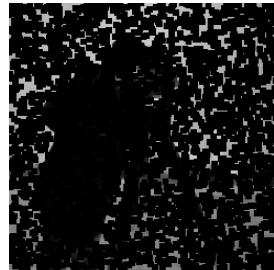
Contra Harmonic 1 Gaussian Filter



Poisson Filter



Salt & Pepper Filter



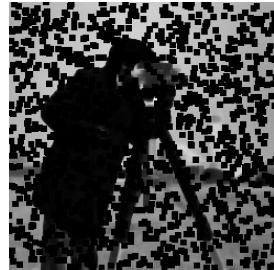
Speckle Filter



Salt Filter



Pepper Filter



MIN:

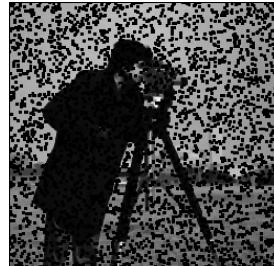
Min Filter: Gaussian Filter



Poisson Filter



Salt & Pepper Filter



Speckle Filter



Salt Filter



Pepper Filter



MAX Filter:

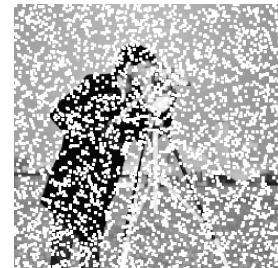
Max Filter: Gaussian Filter



Poisson Filter



Salt & Pepper Filter



Speckle Filter



Salt Filter



Pepper Filter



Median Filter:

Medain Filter: Gaussian Filter



Poisson Filter



Salt & Pepper Filter



Speckle Filter



Salt Filter



Pepper Filter

