1) How is array operation carried out involving one or more images?

a) array by array

b) pixel by pixel

c) column by column

d) row by row

e) column by row

**R: B pixel by pixel**

2) Match the following image formats to their correct number of channels GrayScale, RGB, Black and White I channel, II channels, III channels, IV channels

A) RGB -> I, GrayScale-> III, Black and White -> I

B) RGB -> IV, GrayScale->I, Black and White -> II

C) RGB -> III, GrayScale -> I, Black and White -> I

D) RGB -> II, GrayScale -> I, Black and White -> II

**R: RGB -> III, GrayScale -> I, Black and White -> I**

3) What is the output of a smoothing, linear spatial filter?

a) Median of pixels

b) Maximum of pixels

c) Minimum of pixels

d) Average of pixels

**R: D Average of pixels**

4) Which of the following in an image can be removed by using smoothing filter?

a) Smooth transitions of gray levels

b) Smooth transitions of brightness levels

c) Sharp transitions of gray levels

d) Sharp transitions of brightness levels

**R: C Sharp transitions of gray levels**

5) Which of the following is the disadvantage of using smoothing filter?

a) Blur edges

b) Blur inner pixels

c) Remove sharp transitions

d) Sharp edges

**R: A Blur edges**