LM in Artificial Intelligence
Image Processing and Computer Vision
(Example of Exam)

1) Describe the Harris corner detection algorithm. In the description, provide the basic intuition as well as the detailed mathematical formulation. Also, discuss the invariance properties of the Harris corners and how they are obtained.

2) Describe the bag of visual words (BoW) representation for image classification, explaining how "words" are extracted from images and how the codebook is created. Then, cite one extension of this model and describe its difference with respect to "vanilla" BoW.