# Sample Exam Questions – Module 4

## Lectures 11-13

1. Describe the generic algorithm of the background subtraction technique.

2. In the MOG technique each pixel has an independent statistical process. Which are the main advantages of this?

3. Describe the aperture problem in the context of optical flow.

4. Explain the meaning of the optical flow constraint equation

5. Describe the feature tracking algorithm used to compute $u,v$

6. Which cues are mostly used in the object tracking procedures? Give a brief description of each one.

7. Propose an approach to remove the projective distortion from a perspective image of a plane.

8. In the context of projective transformations describe the application of the RANSAC - RANdom SAmple Consensus – algorithm.

9. Define vanishing points and vanishing lines.

10. Describe a method based on the vanishing points and vanishing lines to quantify 3D measurements.

11. Explain the epipolar geometry of 2 views.

12. Define epipolar line and epipoles.

13. Define the fundamental matrix F and explain a method to determine its elements.