1. What is a pixel and bit characterization of an image
2. What is resolution
3. Spatial and Temporal characterization

Temporal characterization occurs when you have a series of images taken at different time. Correlations between the images are often used to monitor the dynamic changes of the object. Spatial characterization applies when you are analyzing one image. It includes but not limited to the coordinates, intensity, gradient, resolution, to name only a few.

1. Techniques used to avoid the common perspective or parallax error in image acqusition-Software Calibration and Telecentricity
2. Software calibration of the camera
3. What is a telecentric lens arrangement and optical distance / working range
4. Conventional lens vs telecentric lens arrangement
5. Feasibility of telecentric optical arrangement
6. Role of lighting in image processing
7. CMOS vs CCD
8. What is the resolution of the object being measured
9. What is the smallest measurement to be made
10. How to calibrate the di-soric laser fork light barrier
11. Converting the analog signals to object dimensions
12. Application of the project development
13. NI-USB DAQ working principle
14. Theoretical and Practical approach for object dimensional measurements
15. Calibration using a target grid
16. Distortion models
17. Camera Lens calibration versus Real world pixel to units calibration
18. Gradient method for the determination of noise and image edges