Chapter 4

- 1. Scenario based question on applicability of pre trained models like Resnet50, Alexnet, VGG
- 2. Numerical based on Receptive field and number of parameters in VGG
- 3. How does the dimension reduction mechanism work in the Inception model, and
- 4. What are the key differences between normal image classification tasks and fine-grained image recognition.
- 5. Explain the image reidentification problem in computer vision

Chapter 5

- 6. Explain types of image segmentation(instance and semantic)
- 7. Scenario based question on PPnet, Unet and FPN.
- 8. Numerical based on bilinear interpolation.
- 9. Numerical related to single linkage and complete linkage clustering
- 10. Concept of scene parsing.

Chapter 6

- 11. Conceptual difference in action recognition, action classification, and action localization in the context of video analysis.
- 12. How do the Horn and Schunck and Lucas-Kanade optical flow estimation methods compare in terms of their basic concepts, computational cost, strengths, weaknesses, and overall suitability for applications?
- 13. How spatio temporal analysis used to find pattern, trends and anamoly detection.
- 14. Concept of optical flow.
- 15. Motion Model-Based Tracking(Kalman and particle filter)
- 16. Concept of multiple object tracking.