



NPTEL ONLINE COURSE
STRUCTURAL HEALTH MONITORING

TUTORIAL 3

Answer all the questions (Total marks: 20)

PART -A (5X1=5)

1. _____ is the change in health conditions of a structural system in terms of its deterioration in performance (functional).
2. Sampling interval in triggered monitoring depends on _____ of the examined phenomenon.
3. _____ monitoring is carried out with a higher sampling rate.
4. Damage identification can be done through _____ redistribution.
5. In vibration-based damage detection, modal parameters are estimated on the basis of _____.

PART -B (5X3=15)

1. Define long term monitoring and periodic monitoring.
2. What are specific conditions under which long-term monitoring is preferably carried out?
3. Discuss the hypothesis of vibration-based damage detection.
4. List the global methods deployed in damage detection.
5. List important factors that influence maintenance of infrastructure, in general.