



**NPTEL ONLINE COURSE**  
**STRUCTURAL HEALTH MONITORING**

**TUTORIAL 7**

**Answer all the questions (Total marks: 20)**

**PART -A (5X1=5)**

1. In very early stage of monitoring, \_\_\_\_\_ sensors are used.
2. The period of monitoring during reconstruction is \_\_\_\_\_.
3. Fibre optic sensors use \_\_\_\_\_ to read and measure data.
4. Magnetostrictive sensors emit ultrasonic energy with very high strength. State True or False.
5. MEM sensors are manufactured using \_\_\_\_\_ technology.

**PART -B (5X3=15)**

1. List the structures which requires monitoring during construction stage.
2. How FOS can be used in the measurement of moisture ingress?
3. What is magnetostrictive effect?
4. Mention the advantages of smart sensors.
5. Why SHM is mandatory for offshore structures?