Nondestructive testing

Exam Topics – 2021

1. **Tree stability and safety in general**
2. **Evaluating wood stability by the pulling test**
3. **Evaluating breakage safety by the pulling**
4. **Theoretical basis for the dynamic evaluation of tree stability and breakage safety**
5. **The execution of dynamic stability and breakage safety tests; influencing parameters**
6. **Sound velocity measurements and acoustic tomography in tree evaluation**
7. **Calculating the safety factor from tomography data**
8. **Impedance tomography in tree testing**
9. **Resistography for tree testing**
10. **Evaluating wood using sound velocity and longitudinal vibrations**
11. **Evaluating wood using bending and torsional vibrations**
12. **Damped vibrations and forced vibrations; static vs. dynamic MOE**
13. **Ultrasonic defect detection**
14. **Evaluating lumber using optical scanning and laser profile scanning**
15. **Laser fibre orientation scanning**
16. **Electric moisture meters**
17. **Using microwave and NIR radiation in wood NDT**
18. **X-ray applications for wood NDT**
19. **Computed tomography for wood testing**
20. **Acoustic methods in evaluating wooden structures**
21. **Screw withdrawal and pin penetration tests in wooden structures testing**
22. **Resistography and electric measurements in structures testing**
23. **Using in-situ radiography for structural testing**