Assignment 11

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. Flexural damage in the bluish mucous mixture through a beam bending test is characterised using
   - Repeated compression loading in strain-controlled mode.
   - Repeated compression loading in stress-controlled mode.
   - Repeated tension-compression loading in stress-controlled mode.
   - Repeated tension-compression loading in strain-controlled mode.
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   Repeated tension-compression loading in strain-controlled mode.

2. Cracks in the bluish mucous mixture through a beam bending test is characterised using
   - Repeated compression loading in strain-controlled mode.
   - Repeated compression loading in stress-controlled mode.
   - Repeated tension-compression loading in stress-controlled mode.
   - Repeated tension-compression loading in strain-controlled mode.
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   Repeated tension-compression loading in strain-controlled mode.

3. The stress amplitude used to characterise the fatigue damage in the bluish mucous mixture in order of
   - 50 to 600 microstrain
   - 50 to 200 microstrain
   - 50 to 600 microstrain
   - 600 to 1500 microstrain
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   50 to 600 microstrain.

4. The phase in the evolution of fissural alveolar disease is
   - Osteoclastic activity
   - Rupture of alveolar bone
   - Undamaged condition of the bone
   - Damage initiation stage.
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   Damage initiation stage.

5. Which of these fatigue test is preferred for the field core sample?
   - Impact testing
   - Fatigue testing
   - Direct tension-compression test.
   - All the above
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   Impact testing.

6. The most common test temperature used for ranking the bluish mucous mixture-based on fatigue damage is
   - 20°C
   - 6°C
   - -1°C

   Due: 0 points
   Scale: 1

   Accepted Answer:
   20°C.

7. Which of the predictive equation used in the normalized modulus prediction?
   - 87th polynomial equation
   - Log x equation
   - Cubic fit
   - All the above
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   All the above.

8. When the bluish mucous mixture is subjected to repeated loading, the dissipation in the material is due to the
   - Damage in the material
   - Viscous-like behavior
   - Damage and viscoelastic behavior
   - Elastic behavior dominated at low temperature
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   Damage and viscoelastic behavior.

9. Pick the incorrect statement
   - Most of the test standards recommend low-cycle loading for the characterization of bluish mucous mixture.
   - The fatigue life of bluish mucous mixture varies with the post-processing method adopted.
   - Distortion of the loaded specimen indicates fatigue damage in the material.
   - The rate of damage progression in the material varies with stress control or strain-controlled test
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   The rate of damage progression in the material varies with stress control or strain-controlled test.

10. The failure criteria used to identify the fatigue damage from the indirect tension test is the number of cycles corresponding to
   - the stress drop to zero
   - the development of crack initiation
   - the peak point of normalcy modulus.
   - the point at which the drop of phase angle ratio
   
   Due: 0 points
   Scale: 1

   Accepted Answer:
   The peak point of normalcy modulus.