Assignment 7

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

DUE ON 2020-03-10, 23:59 IST.

1. Which of the following mechanical abrasive process utilizes loose abrasives?
   - Honing
   - Grinding
   - Sawing
   - Buffing

2. Which of the following is used in STM?
   - Electronic IC
   - Cantilever tip
   - DMO mirror
   - Smoothed silicon substrate

3. Which of the following device is used in AFM?
   - Electrostatic
   - Capacitive
   - Magnetic
   - All of the above

4. Surface micromachining is:
   - Additive process
   - Subtractive process
   - Constant volume process
   - None of the above

5. Which of the following is present in the feature of dissolution when directly exposed by the UV light?
   - Negative photolithography
   - Positive photolithography
   - None of the above
   - All of the above

6. Which of the following compound does not contain which of the following compound?
   - Sulfuric acid
   - Hydrochloric acid
   - Phosphoric acid
   - Sulfur dioxide

7. Which of the following scheme is used for a water-level bonding scheme?
   - Field assisted bonding
   - Bonding by an intermediate adhesive layer
   - Direct bonding by oxygen plasma
   - All of the above

8. Which of the following is present in the formula \( \lambda = \frac{c \lambda}{v} \) where \( c \) is speed and \( \lambda \) is wavelength and distance between mask and photore sist layer, respectively?
   - Negative photolithography
   - Positive photolithography
   - None of the above
   - All of the above

9. The resolution, of photolithography, is given by the formula \( \frac{t}{s} \) where \( t \) is thickness and \( s \) is space.

10. Which of the following is present in the formula \( k = \frac{a}{d} \) where \( k \) is the number of layers and \( \frac{a}{d} \) is the number of layers?
   - Sulfuric acid
   - Hydrochloric acid
   - Phosphoric acid
   - Sulfur dioxide

11. Which of the following component is not present in the following generator?
   - Eddy current
   - Coating agent
   - DC power source
   - Photore sist generator

12. Which of the following is present in the formula \( \frac{t}{s} \) where \( t \) is thickness and \( s \) is space?