1. Sigma = K/ (f * sqrt(pi*a)) Crack the formula and rearrange it. And a sub race with a uniform perpendicular force with different defects and bring them in order with one creates the highest likelihood for a break.

2. Thermal expansion coefficient of high and low melting point materials. And sketch the binding energy vs atomic distance for both.

3. Toughening mechanisms with metal as an example.

4. Titanium pros and cons, CP-Ti vs Ti 6AL 4V.

5. Explain covalent bonds where they are in thermoplats

6. Chain and step growth, draw and explain.

7. Explain a lithograph 3d printer and the parts of it. Also, the process shall be explained.

8. Biocompatibility matrix explain which criteria it is based on and one test as an example and explain it9. degregation mechanism with an example.

10. Wound healing stages and wound dressing.