1) Activated Sludge Process
   - HRT or HDT
   - Organic or Volumetric loading Rate
   - F/M ratio
   - Sludge Age
   - Sludge volume Index
   - Recirculation Ratio

   } formula

   - Design of ASP

2) Sludge handeling Process
   - Flow Diagram
   - factor affecting Sludge Digestion
   - Sludge Thickening
   - Sludge Digestion Tank
     - Volume of Digestor
     - Design Data

3) Oxidation Pond
   - Diagram
   - Design Data → Elevation correction (Ec)

4) Septic Tank
   - Diagram
   - Design Data
   - Imhoff Tank

5) Sewers

- Types of collection System
  - Shapes [circular, Rectangular, U-shaped, Egg shaped]

→ Maximum and Minimum Velocities in Sewer

→ flow Velocity [Manning's formula]

→ Hydraulic characteristics of Sewer
  - → Running full
  - → Running half full
  - → Running at any other depth

→ Sewer Design

→ fluctuations in Sewage flow
  - → Maximum daily flow
  - → " hourly "
  - → Minimum daily "
  - → " hourly "