3. Steel Bridges

a) Simply Supported Steel Bridge (Truss)

b) Continuous Truss Steel Bridge:

c) Cantilever Steel Truss Bridge
d) Plate-Girder steel Bridge:

- Stiffener
- Pier
- Sec. of plate girder
- Floor beam
- Pier

e) Box-Girder steel Bridge:

- Sec.

f) Arch steel Bridge:

- Bridge on Niagara River
- Max. 500m
- Liverpool - England
5. Cable-stayed Bridge:

6. Suspension Bridge:

7. Temporary and movable Bridge:
   - Floating Bridge
   - Bascule Bridge
   - Pontoon Bridge (military)
   - Lift Bridge
   - Swing Bridge
Substructure

The portion of the Bridge Structure below the level of bearing and above the foundation:

a) Piers
b) Abutments

a) Piers

- Solid
- Cellular pier
- Trestle pier
- Hammerhead
- Frame

Loading on piers: x Dead Load, Live load, Impact
x Wave action
x Ship colliding with piers during storms

b) Abutments:

- Wall
- Section
- Plan