



## **7. Brief list of topics to be covered**

- Introduction to heat transfer
- Heat conduction
  - a.** One-dimensional conduction in steady state and without internal heat production
  - b.** Steady-state one-dimensional conduction with internal heat production
  - c.** Thermal transfers in fins
  - d.** One-dimensional conduction in transient conditions
- Heat convection
  - a.** General equations of convection
  - b.** Laminar and turbulent flow
  - c.** Catalog of correlations for convection
- Enthalpy transport
- Heat exchangers
- Radiative heat transfer