

Questions

„Electrical Lighting and Heating Technology (ELST) - part Heating“

1. Basic terms of heating (heat, specific heat, flux heat). Heat transfer by conduction.
2. Laws of thermodynamics. Heat transfer by convection.
3. Heat transfer by radiation.
4. Analogy between temperature and electric fields.
5. Temperature measurement. Temperature scales. International temperature scale ITS-90.
6. Thermometers – glass tube, bimetal, thermistors, resistance temperature detector. Range and accuracy.
7. Thermocouples – Seebeck effect, types, accuracy and range. Measurement circuit.
8. Non-Contact devices. Advantages and disadvantages.
9. Infrared system. Infrared detectors.
10. Thermal comfort. Thermal state of environment.
11. Heat losses calculation.
12. Electric heating systems.
13. Heat pump. Operating modes function. Types of heat pump units.
14. Heating systems, prices.
15. Consumption structure in various houses.
16. Savings on energy in house.