Test 3

Hygienic evaluation of the indoor microclimate its effect on a person's heat exchange and health condition

1. Optimum microclimate; its definition.
2. Mechanisms of chemical thermoregulation.
3. Physiological mechanism regulating heat emission in various microclimates.
4. The main ways of heat emission.
5. Convection, its definition.
6. Optimum microclimate indicators in residential buildings.
7. Admissible vertical and horizontal temperature fluctuation of indoor air.
8. Hygienic importance of enclosing surface temperature; the effect of low temperature of enclosing surface on heat exchange.
9. The predominant heat emission in humans at an air temperature of 16-17^{o}C, relative humidity of 70-80%, and air velocity of 0.3—0.5 m/sec.
10. Heat emission route that increases considerably upon an increase in the temperature of air and surrounding surfaces.
11. Factors affecting heat emission by radiation.
12. Causes of radiation cooling of man that develops indoors.
13. Human diseases in which abrupt fluctuation of air temperature is especially dangerous.
14. The effect of high relative humidity together with high temperature on heat exchange in humans.
15. The effect of high relative humidity together with low temperature on heat exchange in humans.
16. Equipment measuring relative humidity and air velocity.
17. Rules of measuring air temperature indoors.
18. Equipment measuring air velocity indoors and outdoors.
19. Advantages of through ventilation indoors.