# Question Set 06

1. Which of the following statements are TRUE?

a) To maintain thermal comfort, the DBT of air should be increased as its moisture content increases

b) To maintain thermal comfort, the DBT of air should be decreased as air velocity increases

c) To maintain thermal comfort, the DBT of air should be increased as the temperature of the surrounding surfaces decrease

d) All of the above

1. Which of the following is correct?

a) The metabolic rate depends mainly on age of the human being

b) The metabolic rate depends mainly on the activity level of the human being

c) The metabolic rate depends mainly on the sex of the human being

d) All of the above

1. Which of the following statements are TRUE?

a) Surrounding air velocity affects convective heat transfer from the body only

b) Surrounding air velocity affects evaporative heat transfer from the body only

c) Surrounding air velocity affects both convective and evaporative heat transfers from the body

d) Moisture content of the air affects both convective and evaporative heat transfers from the body

1. Which of the following statements are TRUE?

a) As the amount of clothing increases, the surrounding DBT should be increased to maintain thermal comfort

b) As the amount of clothing increases, the surrounding DBT should be decreased to maintain thermal comfort

c) As the activity level increases, DBT of air should be increased to maintain thermal comfort

d) As the activity level increases, DBT of air should be decreased to maintain thermal comfort

1. From ASHRAE comfort chart it is observed that:

a) Lower dry bulb temperatures and higher moisture content are recommended for winter

b) Lower dry bulb temperatures and lower moisture content are recommended for winter

c) Lower dry bulb temperatures and higher moisture content are recommended for summer

d) Higher dry bulb temperatures and higher moisture content are recommended for summer

1. Which of the following statements are TRUE?

a) For the same metabolic rate, as the thermal load on human body increases, the PMV value increases

b) For the same metabolic rate, as the thermal load on human body increases, the PMV value decreases

c) As the absolute value of PMV increases, the percent of people dissatisfied (PPD) increases

d) As the absolute value of PMV increases, the percent of people dissatisfied (PPD) decreases

1. Which of the following statements are TRUE?

a) When a human body is at neutral equilibrium, the PMV value is 1.0

b) When a human body is at neutral equilibrium, the PMV value is 0.0

c) When a human body is at neutral equilibrium, the PPD value is 0.0

d) When a human body is at neutral equilibrium, the PPD value is 5.0

# ANSWERS

* 1. (c)
  2. (b)
  3. (c)
  4. (b), (d)
  5. (b), (d)
  6. (a) and (c)
  7. (b), (d)