

HOMEWORK 9

Design Factors - Ergonomics (D&M Unit 1 Theory, pg. 21)

1. Briefly explain what is meant by the term ERGONOMICS (2 marks)
2. What is an ERGONOME? (1 mark)
3. Shown opposite is a picture of an office chair. If you had to design a new range of office chairs, what 3 ergonomic factors would you have to consider (See pg. 16 of Unit 1 Theory Booklet)? (3 marks)



4. This is a picture of a hand held power drill. What 2 ergonomic factors would be required before designing such a tool? (2 marks)

5. The picture opposite shows factors which a designer must consider when designing a computer workstation.

a) Which size is important when considering the height of the seat?

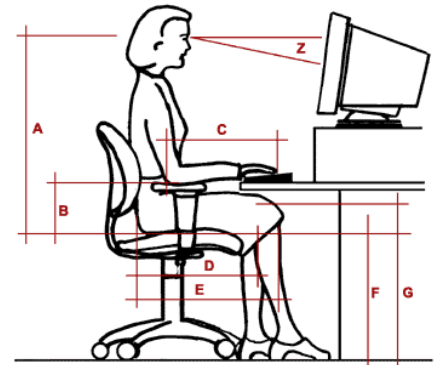
b) Which size is important when considering the height of the chair lumbar support (lower back support)

c) Which height is important in determining the height of the desk?

d) Which factor is important when determining the distance between the arm rest and keyboard?

e) Which factor is important to determine the correct height of the monitor?

(5 marks)



6. Shown opposite is a picture of a person riding a bike. List 5 ergonomic factors which would need to be considered when designing a bike? (5 marks)

