Homework 8: Mechanical devices

# 1. Which one of the following motions describes travel along a straight path? [1]

⬨ Reciprocating motion

⬨ Linear motion

⬨ Rotary motion

⬨ Oscillating motion

# 2. Which type of motion best describes the movement of a washing machine drum? [1]

# 3. Which class of lever best describes the action of lifting a wheeled suitcase? [1]



# 4. What is meant by the term equilibrium when applied to levers? [1]

# 5. Give two functions of a linkage. [2]

# 6. A crank and slider converts one motion into another. State both motions. [2]

# 7. For each of the following statements, state the type of cam described.

# (a) A round cam with a hole for the camshaft positioned off centre. [1]

(b) A cam with a long dwell, a slow rise and a sudden drop. [1]

#  (c) A cam designed to have no dwell period. [1]

(d) A cam with a long dwell and a rapid rise and fall. [1]

# 8. Which type of follower is the most accurate but most prone to wear? [1]

# 9. Explain the use of an idler gear? [2]

 Total 15 marks