QUESTION 1

1. **Dry friction** always opposes the surfaces sliding relative to one another and can have the effect either opposing motion or causing motion in bodies. And it can be said to be a is the force that opposes one solid surface sliding across another solid surface.

**A PRACTICAL EXAMPLE**: Dry sliding of different components over each other results in changes of interfaces. During the running‐in procedure a surface accommodation takes place. There is transfer of material from the softer to the harder component.

1. **Fluid friction** describes the friction between layers of a viscous fluid that are moving relative to each other.

**A PRACTICAL EXAMPLE:** Riding a bike. A seagull soaring through the air. Air resistance is an example of fluid friction caused by the particles that make up air. It causes a falling object to slow down.

QUESTION 2

1. WEDGES: A **wedge** is simply a triangular tool, often made of metal, wood, stone or

plastic. It is thick on one end and tapers to a thin or sharp edge on the other end.

1. SQUARE THREADED SCREW: The **square thread** form is a common screwthread  form, used in high load applications such as lead screws and jackscrews. It gets its name from the square cross-section of the thread.
2. In a **journal bearing**, the shaft rotates inside a loose-fitting bearing shell of softer, often porous, bearing material. Lubricant, such as oil, grease or a low-friction compound like PTFE or graphite is used between the surfaces. The shell is sometimes split into two halves.