## **Take Off and Landing**

- 1. A single-engine aeroplane is fitted with the propeller rotating in a clockwise direction when viewed from the cockpit. If the aeroplane tended to swing to the right during the take-off roll, the most probable cause would be
  - a) torque effect
  - b) slipstream effect
  - c) a cross-wind from the right
  - d) raising the tail too early
- In a tailwheel aircraft with a propeller that rotates clockwise when viewed from the cockpit, which of the following would cause a yaw to the right
  - a) slipsteam effect
  - b) propeller torque
  - c) asymmetric blade effect
  - d) crosswind from the right
- 3 Yaw in a tailwheel aircraft before the tail is raised is mostly caused by
  - a) slipstream effect
  - b) propeller torque
  - c) asymmetric blade effect
  - d) gyroscopic effect
- As the tail is raised on take off in a tailwheel aircraft with a clockwise rotating propeller when viewed from the cockpit, yaw to the left is most likely caused by
  - a) slipstream effect
  - b) propeller torque
  - c) asymmetric blade effect
  - d) gyroscopic effect
- 5. Landing speed (TAS) for a particular weight and configuration of an aircraft
  - a) will increase as relative humidity is decreased
  - b) will increase as altitude is increased
  - c) will remain constant regardless of altitude
  - d) will decrease as altitude is increased

## CASA Aerodynamics 1 Worksheets

- In a tail dragging aircraft, the propeller rotates clockwise when viewed from behind. During the initial application of power at the commencement of the take-off roll the aircraft wants to veer off to the left hand side of the runway. Which of the following factors **is not** a cause of the control difficulty
  - a) asymmetric blade effect
  - b) gyroscopic effect
  - c) slipstream effect
  - d) torque reaction
- 7 Undershoot shear results when an aircraft passes through an area of decreased headwind. Should this happen on approach the aircraft will experience
  - a) an increase in rate of descent and airspeed
  - b) a decrease in rate of descent and airspeed
  - c) a decrease in rate of descent and an increase in airspeed
  - d) an increase in rate of descent and a decrease in airspeed

## **Answers**

1.c 2.d 3.c 4.d 5.b 6.b 7.d