



**EAST AFRICAN SCHOOL OF AVIATION**

**AIS No. 36**

**CAT**

**SUBJECT: PRINCIPLES OF FLIGHT**

**STREAM: BASIC AIS COURSE No. 36**

**Duration: 1½ Hrs**

**DATE: 04/04/2017**

**TIME 8.30 – 10.00 AM**

---

**INSTRUCTION TO CANDIDATES**

1. This paper consists of **TWO (2)** Pages
2. Attempt all questions
3. Read and understand all questions before attempting

**Q.1.** Define the following terms;

- a) Aircraft
- b) Aerodynamics
- c) Airfoils
- d) Angle of attack
- e) Bernoulli's Principle

**(20 marks)**

**Q.2.** List any ten parts of the body of an aeroplane

**(10 marks)**

**Q.3.** Briefly explain how each of the following elements affect the aeroplane in flight

- (a) Weight
- (b) Drag
- (c) Lift
- (d) Thrust
- (e) Icing

**(20 marks)**

**Q.4.** List any ten flight instruments found in the cockpit of an aeroplane which is equipped to fly both IFR and VFR

**(10 marks)**

**Q.5.** How does an aeroplane achieve

- (a) Horizontal stability
- (b) Vertical stability
- (c) Level flight
- (d) Descent

**(20 marks)**

**Q.6.** What parts of an aeroplane make it possible for the following to be achieved by the aeroplane?

- (a) Turn Left or Right
- (b) Climb
- (c) Accelerate
- (d) Remain afloat in the air
- (e) Get airborne

**(20marks)**