



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)