



EAST AFRICAN SCHOOL OF AVIATION

ATC COURSE No. 73

FINAL

SUBJECT: AERODROMES AND GROUND AIDS

STREAM: ATC COURSE No. 73

Duration: 2 Hrs

DATE: 07/04/2017

TIME 8.15 – 10.15 AM

INSTRUCTION TO CANDIDATES

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

Q1. Define the following terms:

- a. Manoeuvring area
- b. Stopway
- c. TODA
- d. Threshold
- e. Aircraft classification number (ACN)

(10 Marks)

Q2. Describe the following runway markings

- a. Threshold markings
- b. Runway holding position markings
- c. Aiming point markings
- d. Runway centerline markings
- e. Runway designator markings

(10 Marks)

Q3 List three obstacle limitation surfaces

(3 Marks)

Q4. Instruction signs which are part of visual aerodrome markings for navigation consist of a _____ inscription on a _____ background. Three examples of these instruction signs are:

(5 Marks)

- Q5. a. List 5 elements of aerodrome data published in the AIP **(5 Marks)**
 b. Decode the following data found in the AIP: **(2 Marks)**
 PCN35/R/B/X/U

- Q6. a. List the contents of an emergency plan document. **(5 Marks)**
 b. List 5 agencies expected to respond to an emergency at an aerodrome. **(5 Marks)**
 c. List the 4 categories of expected emergencies at an aerodrome **(4 Marks)**
 d. What is the responsibility of the emergency operational center? **(1 mark)**

- Q7. a. List the 5 runway lights and their colors. **(5 Marks)**
 b. List the 5 taxiway lights and their colors. **(5 Marks)**

- Q8. Given the following data,
- Runway length required for LANDING at sea level in standard atmosphere is 2100 M
 - Runway length required for TAKEOFF at a sea level site in standard atmosphere is 1800 M
 - Aerodrome elevation is 200m
 - Aerodrome reference temperature is 24°C

- Temperature in the international standard atmosphere for 200 M is 13.7°C
- Runway slope is 0.4 %

What is the actual length of the runway? (5 Marks)

(Show your calculations)

Note: The basic runway length should be increased by 7% for every 300 M of elevation

Runway take off length corrected for elevation and temperature =

Corrected length for elevation x (Aerodrome temp – ART) 0.01 + corrected length for elevation

Runway take off length corrected for elevation, temperature and slope=

(Runway take off length corrected for elevation and temperature x slope x0.1) + Corrected Length for elevation and temperature

Q9 .a. Given the following data relating to HKJK R06,

- TORA is 4117m
- Stopway is 61m
- Clearway is 300m

What are the declared distances for R06?

(3 Marks)

(Show your calculations)

b. Threshold for R06 is displaced by 200m. What is the new LDA?

(2 Marks)