

## EAST AFRICAN SCHOOL OF AVIATION

## ATS SECTION

## FINAL EXAMINATION

## THEORY OF FLIGHT AND COMMUNICATION

COURSE NO. ATC INDUCTION - ATC 74. DURATION 2HRS TIME (2-4PM)

MARKS 100.

Friday 28<sup>TH</sup> April 2017.**WRITE YOUR ANSWERS IN THE SPACES PROVIDED.**

1. Name the system that connects all the ATS units in Kenya for sending and receiving messages concerning the movements of aircraft? (4 marks)

ANS:.....

2. The following designators belong to certain airlines. Name the country of the airline and pronunciation the call sign? (10 marks)

ANS:

	DESIGNATOR	PRONUNCIATION	COUNTRY
a	CRL		
b	KLM		
c	UGA		
d	MSR		
e	UAE		

3. Describe the readability scale. Use the spaces provided in the table below?

**(10 marks)**

	NUMBER INDICATING STRENGTH	DESCRIPTION OF STRENGTH
a		
b		
c		
d		
e		



6. List the basic stages of operation of a piston engine and a turbo-Jet engine **(10 marks)**

ANS:

	PISTON	TURBO- JET
1		
2		
3		
4		
5		
6		

7. List the four forces that act on an aircraft? **(8 marks)**

ANS: .....

8. List the aircraft nationality marks for the following countries **(12 marks)**

ANS:

	COUNTRY	NATIONALITY MARK
a	Zimbabwe	
b	Burundi	
C	Kenya	
d	Rwanda	
e	Tanzania	
F	Uganda	

9. **(10 marks)**

a. State the speed of sound in kilometers, statute miles and Nautical miles per hour?

(i) ..... (ii) ..... (iii) .....

b. Who was Mach?

.....

c. State the formula for the relationship between the speed of sound to the speed of an aircraft.

.....

10.

(14 marks)

a. Write the following airports using ICAO location indicators.

ANSs:

- (i) London .....
- (ii) Kilimanjaro .....
- (iii) Dubai .....
- (iv) Mtito ANDEI . .....
- (v) Malindi .....
- (vi) MOMBASA .....
- (vii) NAKURU .....
- (viii) NAIROBI .....
- (ix) WAJIR .....
- (x) LOKICHOKIO .....

b. Use ICAO phrases to explain the following statements.

ANSs:

	Statements	ICAO Phrase
A	Check and confirm with originator	
b	This exchange of transmissions is ended and no response is expected	
c	My transmission is ended and I expect a response from you.	
d	No or Permission not granted or that is not correct	
e	That is correct	