



# EAST AFRICAN SCHOOL OF AVIATION EXAMINATION

CAT

AIS/MAP SECTION

SUBJECT: FLIGHT NAVIGATION

STREAM AIS ICAO 021 No. 36

Duration: 1 Hr 20 Min

DAY/DATE: Wednesday, 10<sup>th</sup> May 2017

Time: 08.40 – 10.00 a.m.

TOTAL MARKS: 50

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## INSTRUCTION TO CANDIDATES

1. *This paper consists of TWO (2) printed pages*
2. *Read ALL questions carefully before attempting any. Answer them as is appropriate. Answer ALL the questions.*

Q1. Explain briefly the **meaning** of the following terminologies:

- a) Great Circles
- b) The Equator
- c) Meridians
- d) Wind direction
- e) Drift

(10 Marks)

Q2. Briefly **explain** the terms, variation and deviation

(4 Marks)

Q3.

a) Find the **True** direction if the compass direction is 110 degrees and variation is 8 degrees West with a deviation of 6 degrees East.

(3 Marks)

b) What is the Compass direction if the True direction is 150 degrees and variation is 20 degrees east and deviation is 10 degrees west?

(3 Marks)

Q4.

a) A C208 at a speed of N0150 took two hours from Airport A to Airport B. Calculate the **distance** between the two airports.

(3 Marks)

b) The distance from airport A to airport B is 840 nautical miles. How long will an E170 at a speed of N0420 take to move from A to B?

(3 Marks)

Q5. Relief is the manner in which mountains, hills, valleys etc are shown on the map. **List** any three ways in which relief can be depicted in a map.

(6 Marks)

Q6. **List** any two properties of the Mercator's projection

(4 Marks)

Q7. State four methods that are used in indicating scale on maps and charts.

**(8 Marks)**

Q8. **List** any three important qualities of a map projection

(6 Marks)