



# 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)