



EAST AFRICAN SCHOOL OF AVIATION

AIS/MAP

FINAL

SUBJECT: NOTAM INFORMATION MANAGEMENT

STREAM: NOTAM INFO MGT No. 08

Duration: 1½ Hrs

DATE: 16/12/2016

TIME 8.30 – 10.00 AM

INSTRUCTION TO CANDIDATES

1. *This paper consists of **SIX (6)** Pages*
2. *There are 25 questions in total; you are at liberty to begin with any number as long as it is clearly indicated. Though some questions may require more than one answer, they carry the same marks (4 marks each), with possible marks of 100%.*
3. *This is an open book exam where you are free to use your trainee materials BUT NOT any other gadget say, mobile phone, iPad, laptop etc.*

Question Nº 1

Briefly discuss the goal of D-AIM

Question Nº 2

E-TOD was introduced in Annex 15 Chapter 10 as a global standard requiring states to establish two databases. Which one is not?

- A. Electronic terrain databases
- B. Navigation Obstacle databases.
- C. Computer databases

Question Nº 3

Which of the following statements best describe the utility of SWIM?

- A. SWIM makes it possible to have access to real-time, relevant information so users can respond faster, more accurately, creating collaboration opportunities with industry.
- B. Swim enables the efficient transition to Global harmonization of information standards.
- C. SWIM helps to reduce costs and increase agility for the Air Traffic Community.
- D. All of the above

Question Nº 4

When reporting WGS84 coordinates, what is the accuracy required from the following in that order?

	A. <input type="checkbox"/>	B. <input type="checkbox"/>	C. <input type="checkbox"/>
a) Navaids on aerodromes	3m	1 m	3 m
b) Navaids (enroute)	30 m	3 m	1 m
c) Runway thresholds	1 m	30 m	30 m

Question Nº 5

What is the main difference between Required Navigation Performance (RNP) and Area Navigation (RNAV)?

- A. RNAV is a navigation specification without an on-board performance monitoring and alerting function
- B. RNP is a navigation specification without an on-board performance monitoring and alerting function
- C. RNAV and RNP are the same
- D. None of the above

Question Nº 6

Why is it said that UML is the de facto modelling standard with a well-defined model structure and semantics?

Question Nº 7

Which of the following phrases best describe a digital NOTAM?

- A. A radical change, by which the information updates are merged with the information of longer duration
- B. A simple conversion of the current message into a new, more structured format
- C. A piece of information directly usable in the integrated system
- D. A data set made available through digital services containing information essential to systems and automated equipment used by personnel concerned with flight operations
- E. All of the above

Question Nº 8

Which of the following statements is true. The AIRM information constructs can be used:

- A. As the reference for the definition of the payload of a shared ATM Service
- B. To define and manage domain models;
- C. To define the information that is exchanged between providers and consumers.
- D. All of the above

Question Nº 9

Having received the management commitment to undertake an SLA negotiation, what actions should be performed in preparing for the SLA?

- A. Gather agreement team
- B. Determine who will negotiate the SLA
- C. Determine requirements and expectations
- D. Prepare for meeting
- E. All of the above

Question Nº 10

In which chapter of the following documents is the provision of meteorological information to operators and flight crews including pre-flight and in-flight procedures?

- A. ICAO Annex 2 - Chapter 2
- B. ICAO Annex 15 - Chapter 8
- C. ICAO Annex 3 - Chapter 7
- D. None of the above

Question Nº 11

Is it correct to say that AIXM XML Schema is an exchange model for aeronautical data and that it is an implementation of the Conceptual Model as an XML (Extensible Markup Language) schema?

- A. No
- B. Yes

Question Nº 12

The following listed aspects present the changes that will arise as AIS transits to AIM. Which one is not true?

- A. The shift from standardizing products to standardizing data
- B. The increased use of computer technology in the management of information, with an increased emphasis on the digital form of data that will drive all processes for the management of information
- C. The definition of new services where the same information will be made available in the decision support tools for all ATM components
- D. Circulation of the current IAIP products in PDF formats

Question Nº 13

By providing accurate, timely, complete and relevant information, Integrated Briefing will contribute to the overall flight safety by assisting pilots to avoid potentially dangerous situations; True or False?

- A. True
- B. False

Question Nº 14

Given the following geographical coordinates, identify the one with the correct format.

- A. S011834.51,E036573.31
- B. 011962.39S,E0365549.35
- C. S011941.71,E0365351.05

Question Nº 15

Which of these statements is a fact?

- A. SWIM - provides the logical breakdown of required information services and their behavioral patterns.
- B. FIXM - provides the logical breakdown of required information services and their behavioral patterns.
- C. ISRM –provides the logical breakdown of required information services and their behavioral patterns.
- D. AIRM - provides the logical breakdown of required information services and their behavioral patterns.

Question Nº 16

Evaluate the following statement and ascertain as to whether it is true or false. “The e-AIP is based on XML (eXtensible Mark-up Language), which is a meta-language used to define other languages”

- A. True
- B. False

Question Nº 17

Which of the **two reasons** listed below best suits the need to have a unified geodetic system for the whole world?

- A.** Language and economic differences
- B.** The lack of inter-continental geodetic information and Need for global maps for navigation, aviation, and geography
- C.** To make topographical data available of the uninhabited regions of the earth and also provide the same standards of geographical data

Question Nº 18

Which one of these is not an e-TOD application in the aviation industry?

- A.** Terrain warning systems, e.g. GPWS
- B.** Instrument flight procedure design (including circling procedures)
- C.** Contingency procedures
- D.** Satellite systems

Question Nº 19

AIXM 5 has a number of key concepts. Which of the following is not correct?

- A.** A temporality model, including support for the temporary information contained in NOTAM
- B.** Alignment with ISO standards for geospatial information, including the use of GML
- C.** Modular and not extensible to support current and future aeronautical information messaging requirements and additional data attributing requirements
- D.** Support for the latest industry and ICAO requirements for aeronautical data including obstacles, terminal procedures and airport mapping databases

Question Nº 20

Which of the statements provided below best describe what is meant by, “a digital NOTAM eliminates the free form text contained within a NOTAM and replaces the text with a series of structured facts, which pertain to the aeronautical entity concerned”?

- A.** With a series of structured facts, the standards are achieved
- B.** With a series of structured facts, a substantiated proof-of-concept may be realized
- C.** With a series of structured facts, resources for elimination of free text are provided
- D.** With a series of structured facts the framework is not viable

Question Nº 21

Which of the following statements about the AIXM is correct?

- A. The Aeronautical Information Exchange Model (AIXM) Specification supports the data-centric environment
- B. AIXM uses entities, attributes and relationships in order to describe aeronautical features
- C. AIXM details the rules (business and technical) that help define aeronautical information
- D. AIXM is the only one particular implementation of the AICM

Question Nº 22

What was the applicable date for WGS-84 implementation.

- A. 21st January 1999
- B. 1st January 1998
- C. 21st January 1998
- D. 1st January 1999

Question Nº 23

Why should AIS have an SLA?

- A. Is mostly concerned with communication between the parties
- B. It is a means by which AIS may agree, formally, on the provision of data with providers
- C. Is about the ability to execute the agreement efficiently and repeatedly

Question Nº 24

Data models are crucial to realize the future D-AIM. Which of the following statements qualify that claim?

- A. Enable integrated data chain
- B. Enable logical basis for AIM databases
- C. Enable computer automation
- D. All of the above

Question Nº 25

In the establishment of net-centric environment, AIRM takes a layered approach to modelling the information constructs, moving from a "top-down" System-wide model to a model that is focused on the information that is exchanged by users and providers of information. What does it intend to do on a strategic level?