# UTHM
Universiti Tun Hussein Onn Malaysia

# UNIVERSITI TUN HUSSEIN ONN MALAYSIA

## FINAL EXAMINATION
## SEMESTER I
## SESSION 2016/2017

**TERBUKA**

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|---|---|---|
| COURSE NAME | : | AVIATION SAFETY MANAGEMENT |
| COURSE CODE | : | BDL 30602 |
| PROGRAMME | : | 4 BDC |
| EXAMINATION DATE | : | DECEMBER 2016/ JANUARY 2017 |
| DURATION | : | 2 HOURS |
| INSTRUCTION | : | ANSWER **FOUR (4) QUESTIONS** FROM **FIVE (5) QUESTIONS** AVAILABLE |

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1   (a)   Demonstrate that the Department of Civil Aviation Malaysia (DCAM) has taken a pragmatic approach in ensuring rapid expansion of the national aviation industry.

(9 marks)

(b)   Apply the procedures that need to be conducted by an employer in the case of deaths, injuries, and illness at work.

(9 marks)

(c)   Determine whether a given hazardous substance released from vessel or facility is considered as CERCLA-defined hazardous substance.

(7 marks)

Q2   (a)   Edwards (1972) presented the SHELL model dealing with man and machine interface.

(i)    Describe five (5) components of the model.
(ii)   Sketch the relationship between the components of the model.

(6 marks)

(b)   Describe seven (7) human personality traits.

(9 marks)

(c)   Determine two (2) possible new challenges met by the Department of Civil Aviation Malaysia (DCAM) ten (10) years from now in ensuring compliance to standards and recommended practices of the International Civil Aviation Organization (ICAO).

(10 marks)

Q3   (a)   Describe the importance and function of Air Traffic Management (ATM) as a component of Air Traffic Control System (ATC).

(6 marks)

(b)   The Air Accident Investigation and Aviation Safety Board (AAIASB) investigated an accident. The final report did not state the 'probable cause(s)' of the accident, but the 'direct and latent causes' of the accident.
Describe both type of causes in the context of HELIOS FLIGHT 522 accident on 14 August 2005.

(7 marks)

(c)   Apply the mechanism of reporting system for overseeing aviation safety in Malaysia.

(12 marks)

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**Q4**    (a)    Describe five (5) types of airport crisis.

(5 marks)

(b)    According to the Federal Aviation Administration, there are four classifications of airport. State the difference between the four airport classifications.

(10 marks)

(c)    Heaven Express Flight 812 is a scheduled passenger service for Dubai to Kuala Lumpur. The flight departed from Dubai International Airport and is scheduled to land at Kuala Lumpur International Airport (KLIA). During landing, the Heaven's Boeing 737-800 overrun the runway and crash at the far end. Evaluate the situation and suggest the emergency response that needs to be carried out in this situation.

(10 marks)

**Q5**    (a)    As mentioned in Annex 19: Safety Management of International Civil Aviation Organisation (ICAO), States is responsible to establish a State Safety Programme (SSP) in order to achieve an Acceptable Level of Safety (ALoS) in civil aviation.

(i)    Define ALoS and provide an example.
(ii)   If you are given the responsibility as the State Accountable Executive, how do you implement the SSP

(15 marks)

(b)    An aircraft maintenance organisation (AMO) is monitoring its maintenance incident performance. The monthly incident statistic generated from the Safety Department is given in Table 1.

Table 1: Last year monthly reported incident

| Month | Reported Incident |
|-----------|:---:|
| January | 3 |
| February | 0 |
| Mac | 7 |
| April | 5 |
| Mei | 3 |
| Jun | 2 |
| July | 1 |
| August | 1 |
| September | 5 |
| October | 5 |
| November | 3 |
| December | 0 |

As the appointed safety manager, suggest to the AMO Top Management:

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(i)     The performance indicator you will use to monitor the incident performance
(ii)    The alerts and triggers (please show your calculation when necessary)
(iii)   The current performance target.

(15 marks)

-   **END OF QUESTION**   -

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