

2207/306
AIRFIELD SAFETY AND
PROCEDURES
June/July 2018
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
DIPLOMA IN AERONAUTICAL ENGINEERING
(AVIONICS OPTION)

AIRFIELD SAFETY AND PROCEDURES

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Drawing instruments.

This paper consists of EIGHT questions. Answer FIVE questions.

All questions carry equal marks.

Maximum marks for each question are as indicated.

Candidates should answer the questions in English.

This paper consists of 3 printed pages.

**Candidates should check the question paper to ascertain that
all the pages are printed as indicated and that no questions are missing.**

1. (a) Explain **two** types of modification which should be entered in the modification records book. (2 marks)
- (b) Highlight the information contained in the technical logbook. (5 marks)
- (c) Outline **eight** certificates that must be provided for before an aircraft can be released for flight. (8 marks)
- (d) List **five** limitations and conditions of a certificate of fitness of flight. (5 marks)

2. Explain the procedure and safety precautions to be observed when starting a piston engine by hand swinging under the following headings:
- (a) precautions; (5 marks)
- (b) sucking-in; (5 marks)
- (c) starting; (5 marks)
- (d) blowing out. (5 marks)

3. (a) Highlight the procedure of connecting and disconnecting external power in each of the following aircraft types:
- (i) ultra-light; (5 marks)
- (ii) passenger. (5 marks)

- (b) Describe the assembly and safety requirements of aircraft gas charging trolleys. (10 marks)

4. (a) Explain the meaning of the following terms as applied to flight safety:
- (i) fatal accident;
- (ii) operator; *S. 61(3)(c)*
- (iii) precautionary landing. *Bo net* (3 marks)

- (b) Outline **seven** types of information contained in a forced landing notification. (7 marks)

- (c) Describe **five** ways of preserving evidence after an aircraft accident for the purposes of investigation by appropriate authority. (10 marks)

5. (a) List **four** ways in which maximum possible protection from safety devices is achievable. (4 marks)

- (b) Highlight the safety procedure followed when working on electrical system if someone gets electrocuted. (10 marks)

- (c) Describe the construction, operation and status indication of a carbon-dioxide hand held fire extinguisher. (6 marks)

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6. Describe the maintenance documentation general procedure in an airline including contracted maintenance. (20 marks)

7. (a) Describe the stores procedure applicable to aircrafts parts/components from receipt to dispatch. (16 marks)

(b) Explain the responsibility of the chief inspector in an organization with respect to the stores procedure. (4 marks)

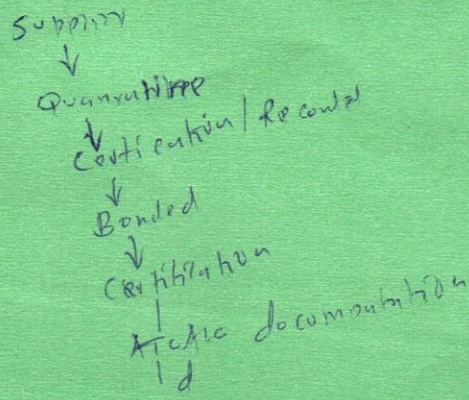
8. With reference to aircraft crash and rescue procedures, discuss the execution of each of the following at the crash site:

(a) triaging and tagging; (5 marks)

(b) interior rescue operation; (9 marks)

(c) victim removal procedures. (6 marks)

Quarantine



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