INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:
Answer booklet;
Mathematical tables/Non-programmable scientific calculator.
This paper consists of EIGHT questions in TWO sections; A and B.
Answer question ONE and any other TWO questions from section A.
Answer TWO questions from section B.
All questions carry equal marks.
Maximum marks for each part of a question are as shown.
Candidates should answer the questions in English.

This paper consists of 4 printed pages.
Candidates should check the question paper to ascertain that all
the pages are printed as indicated and that no questions are missing.

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SECTION A: WORKSHOP TECHNOLOGY

Answer question ONE any other TWO questions from this section.

1. (a) Outline five objectives of industrial safety. (5 marks)
(b) With the aid of a sketch, describe austempering as used in heat treatment of aircraft hardware. (10 marks)
(c) Highlight the procedure of carrying out quality control. (5 marks)

2. (a) With the aid of sketches, describe each of the following sheet metal operations:
   (i) punching;
   (ii) blanking. (10 marks)
(b) Highlight the procedure of marking out lines on a 6 mm rectangular metal work piece. (6 marks)
(c) Outline four advantages of forging as used in metal work. (4 marks)

3. (a) With the aid of a sketch, describe the leftward welding technique. (10 marks)
(b) Outline four reasons for carrying out finishing operations on machined surfaces. (4 marks)
(c) List three types of waste in an industry. (3 marks)
(d) Outline three forms of metal supply. (3 marks)

4. (a) With the aid of sketches, describe each of the following aircraft fasteners:
   (i) locking plate;
   (ii) tab washer. (10 marks)
(b) Explain each of the following terms as used in grinding wheels:
   (i) abrasives;
   (ii) grade;
   (iii) structure. (6 marks)
5. (a) (i) Describe ‘hand smogging’ as used in aircraft corrosion control.

(ii) Outline two limitations of short term aircraft corrosion control.

(b) With the aid of a sketch, explain the metal Non-destructive Testing (NDT) using the magnetic dust method.

(c) Highlight five objectives of aircraft maintenance.

SECTION B: LIFE SKILLS

Answer any TWO questions from this section.

6. (a) Outline four ways in which a person may demonstrate assertive behaviour.

(b) Differentiate empathy from sympathy.

(c) Outline four measures that a parent may take to enhance the self esteem of a child.

(d) (i) Outline four factors that may contribute to child labour in a community.

(ii) Highlight four strategies that the government may adopt to minimize child labour.

7. (a) (i) Explain the term ‘eustress’.

(ii) Highlight six behavioural symptoms that a stressed person may exhibit.

(b) The management of Peva Flights Limited has noticed increased conflicts among the employees of the organisation. Explain four reasons that may account for such conflicts.

(c) Explain two ways in which Human Immunodeficiency Virus (HIV) may be transmitted from a mother to a child.
8. (a) (i) Explain the phrase 'emotional intelligence'.

(ii) Explain three values that may be associated with emotional intelligence. (8 marks)

(b) Explain each of the following terms as used in Life Skills:

(i) negotiation;

(ii) creative thinking. (4 marks)

(c) Distinguish between drug misuse and drug abuse. (4 marks)

(d) Highlight four high-risk behaviours that an individual may engage in as a result of depression. (4 marks)

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