

## BASIC EXAMINATION STANDARD

### 1. GENERAL

1.1. All basic examinations shall be carried out using the multi-choice question format and essay questions as specified below. The incorrect alternatives shall seem equally plausible to anyone ignorant of the subject. All of the alternatives shall be clearly related to the question and of similar vocabulary, grammatical construction and length. In numerical questions, the incorrect answers shall correspond to procedural errors such as corrections applied in the wrong sense or incorrect unit conversions: they shall not be mere random numbers.

1.2. Each multi-choice question shall have three alternative answers of which only one shall be the correct answer and the candidate shall be allowed a time per module which is based upon a nominal average of 75 seconds per question.

1.3. Each essay question requires the preparation of a written answer and the candidate shall be allowed 20 minutes to answer each such question.

1.4. Suitable essay questions shall be drafted and evaluated using the knowledge syllabus in

1.5. Each question will have a model answer drafted for it, which will also include any known alternative answers that may be relevant for other subdivisions.

1.6. The model answer will also be broken down into a list of the important points known as Key Points.

1.7. The pass mark for each module and sub-module multi-choice part of the examination is 75 %.

1.8. The pass mark for each essay question is 75 % in that the candidates answer shall contain 75 % of the required key points addressed by the question and no significant error related to any required key point.

1.9. If either the multi-choice part only or the essay part only is failed, then it is only necessary to retake the multichoice or essay part, as appropriate.

1.10. Penalty marking systems shall not be used to determine whether a candidate has passed.

1.11. A failed module may not be retaken for at least 90 days following the date of the failed module examination, except in the case of a maintenance training organisation approved in accordance with Annex IV (Part-147) which conducts a course of retraining tailored to the failed subjects in the particular module when the failed module may be retaken after 30 days.

1.12. The time periods required by point 66.A.25 apply to each individual module examination, with the exception of those module examinations which were passed as part of another category licence, where the licence has already been issued.

1.13. The maximum number of consecutive attempts for each module is three. Further sets of three attempts are allowed with a 1 year waiting period between sets.

The applicant shall confirm in writing to the approved maintenance training organisation or the competent authority to which they apply for an examination, the number and dates of attempts during the last year and the organisation or the competent authority where these attempts took place. The maintenance training organisation or the competent authority is responsible for checking the number of attempts within the applicable timeframes.

## **2. NUMBER OF QUESTIONS PER MODULE**

### **2.1. MODULE 1 — MATHEMATICS**

Category A: 16 multi-choice and 0 essay questions. Time allowed 20 minutes.  
Category B1: 32 multi-choice and 0 essay questions. Time allowed 40 minutes.  
Category B2: 32 multi-choice and 0 essay questions. Time allowed 40 minutes.  
Category B3: 28 multi-choice and 0 essay questions. Time allowed 35 minutes.

### **2.2. MODULE 2 — PHYSICS**

Category A: 32 multi-choice and 0 essay questions. Time allowed 40 minutes.  
Category B1: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B2: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B3: 28 multi-choice and 0 essay questions. Time allowed 35 minutes.

### **2.3. MODULE 3 — ELECTRICAL FUNDAMENTALS**

Category A: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B1: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B2: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B3: 24 multi-choice and 0 essay questions. Time allowed 30 minutes.

### **2.4. MODULE 4 — ELECTRONIC FUNDAMENTALS**

Category B1: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B2: 40 multi-choice and 0 essay questions. Time allowed 50 minutes.  
Category B3: 8 multi-choice and 0 essay questions. Time allowed 10 minutes.

### **2.5. MODULE 5 — DIGITAL TECHNIQUES/ELECTRONIC INSTRUMENT SYSTEMS**

Category A: 16 multi-choice and 0 essay questions. Time allowed 20 minutes.  
Category B1.1 and B1.3: 40 multi-choice and 0 essay questions. Time allowed 50 minutes.  
Category B1.2 and B1.4: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B2: 72 multi-choice and 0 essay questions. Time allowed 90 minutes.  
Category B3: 16 multi-choice and 0 essay questions. Time allowed 20 minutes.

### **2.6. MODULE 6 — MATERIALS AND HARDWARE**

Category A: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B1: 72 multi-choice and 0 essay questions. Time allowed 90 minutes.  
Category B2: 60 multi-choice and 0 essay questions. Time allowed 75 minutes.  
Category B3: 60 multi-choice and 0 essay questions. Time allowed 75 minutes.

### **2.7. MODULE 7A — MAINTENANCE PRACTICES**

Category A: 72 multi-choice and 2 essay questions. Time allowed 90 minutes plus 40 minutes.  
Category B1: 80 multi-choice and 2 essay questions. Time allowed 100 minutes plus 40 minutes.  
Category B2: 60 multi-choice and 2 essay questions. Time allowed 75 minutes plus 40 minutes.

### **MODULE 7B — MAINTENANCE PRACTICES**

Category B3: 60 multi-choice and 2 essay questions. Time allowed 75 minutes plus 40 minutes.

### **2.8. MODULE 8 — BASIC AERODYNAMICS**

Category A: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.

Category B1: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B2: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B3: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.

#### 2.9. MODULE 9A — HUMAN FACTORS

Category A: 20 multi-choice and 1 essay question. Time allowed 25 minutes plus 20 minutes.  
Category B1: 20 multi-choice and 1 essay question. Time allowed 25 minutes plus 20 minutes.  
Category B2: 20 multi-choice and 1 essay question. Time allowed 25 minutes plus 20 minutes.

#### MODULE 9B — HUMAN FACTORS

Category B3: 16 multi-choice and 1 essay questions. Time allowed 20 minutes plus 20 minutes.

#### 2.10. MODULE 10 — AVIATION LEGISLATION

Category A: 32 multi-choice and 1 essay question. Time allowed 40 minutes plus 20 minutes.  
Category B1: 40 multi-choice and 1 essay question. Time allowed 50 minutes plus 20 minutes.  
Category B2: 40 multi-choice and 1 essay question. Time allowed 50 minutes plus 20 minutes.  
Category B3: 32 multi-choice and 1 essay questions. Time allowed 40 minutes plus 20 minutes.

#### 2.11. MODULE 11A — TURBINE AEROPLANE AERODYNAMICS, STRUCTURES AND SYSTEMS

Category A: 108 multi-choice and 0 essay questions. Time allowed 135 minutes.  
Category B1: 140 multi-choice and 0 essay questions. Time allowed 175 minutes.

#### MODULE 11B — PISTON AEROPLANE AERODYNAMICS, STRUCTURES AND SYSTEMS

Category A: 72 multi-choice and 0 essay questions. Time allowed 90 minutes.  
Category B1: 100 multi-choice and 0 essay questions. Time allowed 125 minutes.

#### MODULE 11C — PISTON AEROPLANE AERODYNAMICS, STRUCTURES AND SYSTEMS

Category B3: 60 multi-choice and 0 essay questions. Time allowed 75 minutes.

#### 2.12. MODULE 12 — HELICOPTER AERODYNAMICS, STRUCTURES AND SYSTEMS:

Category A: 100 multi-choice and 0 essay questions. Time allowed 125 minutes.  
Category B1: 128 multi-choice and 0 essay questions. Time allowed 160 minutes.

#### 2.13. MODULE 13 — AIRCRAFT AERODYNAMICS, STRUCTURES AND SYSTEMS

Category B2: 180 multi-choice and 0 essay questions. Time allowed 225 minutes. Questions and time allowed may be split into two examinations as appropriate.

#### 2.14. MODULE 14 — PROPULSION

Category B2: 24 multi-choice and 0 essay questions. Time allowed 30 minutes.

#### 2.15. MODULE 15 — GAS TURBINE ENGINE

Category A: 60 multi-choice and 0 essay questions. Time allowed 75 minutes.  
Category B1: 92 multi-choice and 0 essay questions. Time allowed 115 minutes.

#### 2.16. MODULE 16 — PISTON ENGINE

Category A: 52 multi-choice and 0 essay questions. Time allowed 65 minutes.  
Category B1: 72 multi-choice and 0 essay questions. Time allowed 90 minutes.  
Category B3: 68 multi-choice and 0 essay questions. Time allowed 85 minutes.

#### 2.17. MODULE 17A — PROPELLER

Category A: 20 multi-choice and 0 essay questions. Time allowed 25 minutes.  
Category B1: 32 multi-choice and 0 essay questions. Time allowed 40 minutes.

#### MODULE 17B — PROPELLER

Category B3: 28 multi-choice and 0 essay questions. Time allowed 35 minutes.