



# ARTP

## Full Certificate in Spirometry

### Guidance for compiling an ARTP Full certificate portfolio

The examiner will be looking for the relevant information as set out below

#### **Section A**

##### **(1 – 4) Contents, background information and overall presentation:**

Contents page with appropriate references, page numbers, a basic summary CV, legible, neat and well presented portfolio. Background information to include place of work, number of tests, type of patients being tested etc so the examiner has a feel for the service you are delivering. (9 marks)

##### **(5) Spirometry Performance Criteria:**

Relevant pre test instructions, contra indications to testing and the local protocol for testing / performance of spirometry. This should be in the form of an operating procedure. Ensure to include acceptability criteria you use when performing spirometry. You must state which guidelines you use to classify patients and interpret the results. (18 marks)

##### **(6) Peak Flow:**

A diagram of the peak flow meter and an explanation of the operating principles of how it works (2 marks)

##### **(7) Spirometer:**

A diagram of the mechanism of the working of the spirometer (internal mechanism) and an explanation of the operating principles, i.e. flow or volume measuring device. (6 marks)



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### Section B

#### **(8) Calibration or Verification:**

A clear protocol and procedure should be included for the performance of calibration / verification. The frequency of verification **and** any action taken when error is encountered should be stated. 20 datasets for evidence of the calibration / verification of equipment that you have performed (can be tabulated but extra marks will be awarded for inclusion of raw data). This data should be from separate sessions, it is not acceptable to include 20 verification performed on the same day. (21 marks)

#### **(9) Quality Control – QC:**

A clear procedure for physiological Quality Control and the reasons for QC. Include hard copy and results generated over the 10 days with calculation of mean values and normal physiological ranges (+/-5%) for FEV1, FVC and PEF. (21 marks)

#### **(10) Cleaning:**

A clear procedure should be included and evidence of a cleaning log with operative signatures. Procedures for immuno-compromised patients and infectious patients should be documented. (12 marks)

#### **(11) Case History:**

Take one of your patient tests and produce a case study. Comprehensive information is required to present a history of the patient. This will include presenting symptoms, relevant previous medical and occupational history, smoking history, current drug therapy, investigations performed, results of test, diagnosis, prognosis and future management.

“Investigations performed” should include a description of tests other than spirometry such as chest x-ray, bloods etc.

“Results of tests” should discuss any spirometry the patient has had performed and the interpretation / outcome of these. Following all of these investigations, what is the patient’s diagnosis and then for this condition what is the prognosis and future management for this patient. The case history must be well structured making sure it is grammatically correct and neat. Required word count and actual word count should be stated. There is a word count penalty of (-10% of overall mark if over/under by >10%) A breach of patient’s confidentiality will result in an automatic fail. (30 marks)



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### **Patient Tests Section:**

The examiner will be expecting nine different patient test results with a brief patient history including diagnosis, smoking, treatment (and when it was last taken). The results should include: obstructive patients of varying degrees, positive and negative bronchodilator reversibility tests and restrictive defects. Every effort needs to be visible in order for the examiner to check quality, with the results you have selected being highlighted. If a print out of all results cannot be produced, a table of all results should be created. The traces must be technically acceptable, the minimum number of manoeuvres must have been performed and there must be 2 FEV1 and 2 FVC within 100ml or 5% whichever the greatest. The first thing the examiner will check is that results are technically acceptable and meet ARTP reproducibility guidelines for FEV1, FVC and VC. If they do not, that patient test will not be marked and awarded zero. If reproducibility is met the examiner will check the technically best test was selected. Marks will be awarded for interpretation. You must state which guidelines you use to classify patients and interpret the results. Describe each parameter and suggest a possible diagnosis from the patient history to be awarded maximum marks. (54 marks)

### **Problems Encountered:**

5 different hard copies / sketch of problems that can occur on tests such as slow start, cough etc. Marks are awarded for copy of trace, identification of the error and suggestions to overcome the problem. (15 marks)

**Sections in the portfolio that are related to the practical performance of the tests, practical and interpretation skills required to undertake a spirometry service will have more weighting and therefore more marks are allocated to these sections.**

After you have finished your portfolio, give it another check to ensure you have included all that is required ensuring that it is neat and well presented.