

International Module

W503 - Noise - Measurement and its Effects

Formative Practical Assessment — Guidance

for Tutors

1. Introduction

All candidates must undertake four practical exercises and write them up to the standard required for laboratory notebooks or field notes. These will be marked by the course tutor during the course. These practical exercises are an essential part of the examination process and will be subject to random audit for quality assurance purposes.

2. The Practical Requirements

The practical exercises should be designed by the course tutor(s) to test the basic skill of the candidate in making measurements of conditions that are required to assess the risks from workplace noise. The tutor may need to arrange access to suitable noise-creating plant or equipment to give a suitable acoustic environment in which measurements can be carried out. The exercises must include the following elements:

- The set up and use of an integrating sound level meter
- The set up and use of personal noise dose meters
- The measurement of sound frequency (including octave band levels) for specific noise sources or in a noisy environment
- The evaluation of the acoustic performance of two types of hearing protector against typical industrial noise

Access to reference material and written procedures is allowed during these exercises.

3. Reporting and Marking

The set up and measurement study should be written up to the standards expected for a laboratory notebook or field notes and handed in for assessment at the end of the practical exercise. The candidates must include all readings and calculations so that they can be checked.

Each practical exercise notes should contain the following elements:

- a) Location and date
- b) A brief description of the process or situation
- c) Environment involved
- d) Equipment used
- e) Monitoring information
- f) Calculation of results
- g) Interpretation and recommendation (if appropriate)
- h) Name of candidate

The notebook or field notes reports must be handed in at the completion of the practical session and retrospective reporting will not be allowed. The course provider/tutor will assess each practical notebook or field notes report and compile a report per candidate as per the attached form.

The tutor must return the practical evaluation report for each candidate to BOHS within 5 days of the course completion.

4. Benchmark Marking Schedule

As the tutor is responsible for designing suitable studies it is not practicable to provide a fully detailed predefined marking schedule. However the following are examples of what the tutor needs to look for in each case and are provided for guidance.

a) The set up and use of an integrating sound level meter

Visual Check

- Set up and calibration of sound level meter
- Correct positioning of microphone for workplace exposure measurements
- · Correct recording of measurement data

Marking of Write Up

- · Appropriate measurement parameters used
- Accurate reporting of measurement data
- b) The set up and use of personal noise dose meters

Visual Check

- Set up and calibration of noise dose meter(s)
- Microphone correctly positioned on wearer(s)
- Characteristics of noise exposure noted

Marking of Write Up

- Correct calculation of noise dose data
- Valid interpretation of data
- c) Measurement of octave band levels of a noisy environment

Visual Check

- Set up of measurement equipment correct
- Correct recording of measurement data

Marking of Write Up

- Correct reporting of octave band data
- Valid interpretation of octave band data
- d) The evaluation of the acoustic performance of two types of hearing protector against typical industrial noise

Visual Check

- Hearing protectors correctly described
- Noise-attenuating characteristics of hearing protectors correctly noted



Marking of Write Up

- Correct reporting of noise-attenuating characteristics
- Correct calculation of acoustic performance
- Conclusions and recommendations valid



International Module

W503 - Noise - Measurement and its

Effects Formative Practical Evaluation

- Report

Name of Candidate				
Date of Birth			Date of Evaluation	
Evaluation Location				
Course Provider				
		Pass/Fail	Comments	
The set up and use of an integrating sound level meter				
The set up and use of individual noise dose meters				
The measurement of octave band levels of a noisy environment				
The evaluation the acoustic performance of two types of hearing protector against typical industrial noise				
Overall Decision				
Name of tutor covering practical evaluation				
Signature of tutor covering practical evaluation				

Please Note: Information entered into the comments column can be given to the candidate for re-sit purposes.



International Module

W503 - Noise - Measurement and its Effects

Formative Practical Assessment — Guidance for Candidates

1. Introduction

Candidates taking the W503 international examination in "Noise - Measurement and its Effects" are required to demonstrate that they have appropriate practical skills in field measurements and interpretation of data. Therefore, all candidates must undertake four practical exercises and write these up for marking to the standards of a laboratory notebook or field notes by the course tutor during the course. This will be regarded as an essential part of the examination process.

2. The Practical Requirements and Reporting

The practical exercises are designed to test the basic skill of the candidate in assessing risks from workplace noise.

- The set up and use of an integrating sound level meter
- The set up and use of personal noise dose meters
- The measurement of octave band levels in a noisy environment
- The evaluation of the acoustic performance of hearing protectors

Access to reference material and written procedures is allowed during these

exercises. For each exercise the candidate should:

- a) Select the appropriate equipment for the relevant measurement
- b) Correctly assemble and calibrate the equipment
- c) Read off the relevant values
- d) Correctly calculate the requested values
- e) Calculate and interpret the data and make suitable recommendations (The course provider should provide typical equipment to give a suitable noise environment for the candidates to measure)
- f) Submit a written practical report for the exercise

The set up and measurement study will need to be written up to the standards expected for a laboratory notebook or field notes and handed in for assessment at the end of the practical exercise. The candidates must include all readings and calculations so that they can be checked.

Each practical notebook report should contain the following elements:

- a) Location and date
- b) A brief description of the process or situation
- c) Equipment used and its calibration.
- d) Measured values
- e) Calculation of results
- f) Interpretation and recommendation
- g) Name of candidate



Assessment of Practical Notebook or Field Notes Reports

The notebook or field notes reports must be handed in at the completion of the practical session as retrospective reporting will not be allowed. The course provider/tutor will assess each practical notebook report and return the practical evaluation report for each candidate to BOHS.