

Marking criteria

Total out of 20 (to be scaled out of 10)

Criterion	0/5	1/5	2-3/5	3-4/5	5/5
Correctness of theoretical and experimental results.	Results missing.	Results which are inaccurate by a large amount, lacking explanation and/or with incorrect assumptions. Theoretical results but no experimental results or vice versa.	Basic results listed with no comparative analysis.	Results generally correct, showing correlation between theoretical and experimental answers.	Correct results with correct assumptions and any deviations well explained.
Understanding of the relevant engineering principles that must be applied to describe the behaviour of the system and discrimination between relevant and irrelevant information in the context.	Engineering principles missing	Application of incorrect or irrelevant engineering principles. Unjustified or incomplete use of information.	Simple explanation of system behaviour through description of observable trends from results without justification.	Use of several possibly irrelevant pieces of information, but with some justification. Good understanding of the relevant engineering principles.	Consistent and well justified discrimination between relevant and irrelevant information. Clear appreciation of the relevant engineering principles.
Description of the experiment with clear calculations in terms of vibration analysis.	Calculations missing.	A system description that does not match reality. Major faults with mathematical analysis.	General description of the experiment, closely derived from the provided instructions.	Minor mistakes in calculations or diagrams. Cluttered diagrams or poor labelling on an overall correct representation. Minor mistakes in mathematical analysis.	Clear description representation of the system and its responses. Mathematical analysis is correct and clearly presented.
Demonstrate an ability to communicate clearly and precisely about technical matters related to vibration analysis. Additionally, demonstrate this ability in jargon-free language as is appropriate for lay persons as well as in technical terms for an intended audience of peers and practicing engineers. This criterion covers all aspects of the presentation of the report including overall appearance, structure, formatting, readability, spelling and grammar.	Report missing.	Poorly structured report, incomplete content and unclear use of language.	Poorly laid out report, but containing all the required sections. Understandable spelling and grammar but with room for improvement in a professional context.	A report with logical structure, generally consistent formatting and minor spelling and grammatical errors. Alternatively, overly complex terminology that is not suitable in an engineering context.	Full marks are awarded for a report which has a logical structure, is neatly and consistently formatted and of a professional standard of presentation.