

	<b>No marks</b>	<b>1/4 marks</b>	<b>1/2 marks</b>	<b>3/4 marks</b>	<b>Full marks</b>
<b>Introduction (10%)</b>	Absent or simple rewording of laboratory handout		A brief explanation of how the equipment operates is given with some errors. The aims of the laboratory experiment are mentioned but not explained well. The introduction shows that the student has an understanding of some of the aims and expected outcomes of the laboratory experiment.		The practical application of the equipment to be tested is clearly explained. A good explanation of how the equipment operates is given. Advantages and disadvantages of the equipment are mentioned. The aims of the laboratory experiment are clearly explained. The introduction shows that the student has an excellent understanding of the aims and expected outcomes of the laboratory experiment.
<b>Task 1</b> <b>VHDL Code (25%)</b>	The VHDL code is not logically correct and also contains many syntax errors. The code is not documented. The VHDL code shows that the student has no understanding of some aspects of the operation of the music synthesizer.	The VHDL code is logically correct but contains many syntax errors. Some parts of the code are documented. The VHDL code shows that the student has a limited understanding of some aspects of the operation of the music synthesizer.	The VHDL code is logically correct but contains some syntax errors. The code is documented with some parts of the program explained. The VHDL code shows that the student has a good understanding of some aspects of the operation of the music synthesizer.	The VHDL code is mostly correct and error free. The code is documented in a clear and concise manner with most parts of the program explained. The VHDL code shows that the student has a good understanding of the operation of the music synthesizer.	The VHDL code is correct and error free. The code is documented in a clear and concise manner with all parts of the program explained. The VHDL code shows that the student has an excellent understanding of the operation of the music synthesizer.
<b>Task 2</b> <b>Frequency Synthesizer (20%)</b>	No questions were answered correctly. The explanation of the information provided by each graph is incorrect. The answers to the questions and explanations of the graphs show that the student has no understanding of the operation of the music synthesizer.	Some questions were answered correctly. The remaining questions were answered incorrectly. An explanation of the information provided by each graph is present but contains errors. The answers to the questions and explanations of the graphs show that the student has a limited understanding of some aspects of the operation of the music synthesizer.	Some questions were answered correctly. The remaining questions were answered partially correctly. An explanation of the information provided by each graph was present but contained errors. The answers to the questions and explanations of the graphs show that the student has a good understanding of some aspects of the operation of the music synthesizer.	Most questions were answered correctly. The remaining questions were answered partially correctly. A clear explanation of the information provided by each graph is present. The answers to the questions and explanations of the graphs show that the student has a good understanding of the operation of the music synthesizer.	All questions were answered correctly. A clear explanation of the information provided by each graph is present. The answers to the questions and explanations of the graphs show that the student has an excellent understanding of the operation of the music synthesizer.
<b>Task 3</b> <b>Music Score (10%)</b>	No questions were answered correctly. The answers to the questions show that the student has no understanding of the operation of the music synthesizer.	Some questions were answered correctly. The remaining questions were answered incorrectly. The answers to the questions show that the student has a limited understanding of some aspects of the operation of the music synthesizer.	Some questions were answered correctly. The remaining questions were answered partially correctly. The answers to the questions show that the student has a good understanding of some aspects of the operation of the music synthesizer.	Most questions were answered correctly. The remaining questions were answered partially correctly. The answers to the questions show that the student has a good understanding of the operation of the music synthesizer.	All questions were answered correctly. The answers to the questions show that the student has an excellent understanding of the operation of the music synthesizer.
<b>Discussion (20%)</b>	Absent or simple rewording of laboratory handout.	A discussion is present but contains major errors. The interpretation of results is incorrect or incomplete. The discussion shows that the student has a limited understanding of some aspects of the results of the experiments.	The major results are discussed but some aspects are not supported by precise theory or valid information. A more comprehensive discussions of the results are necessary. The discussion shows that the student has a good understanding of some aspects of the results of the experiments.	An adequate discussion of the results is provided with comparisons to the theory/simulation. Explanations of the differences between measurement and theory are provided. The discussion shows that the student has a good understanding of the operation and use of the equipment tested and has adequately interpreted most of the results of the experiments.	A full discussion of all the results is provided with comparisons to the theory/simulation. Explanations of the differences between measurement and theory are correctly provided. The discussion shows that the student has an excellent understanding of the operation and use of the equipment tested and has fully and clearly interpreted all the results of the experiments.
<b>Presentation (15%)</b> <b>Maximum Length: 1000 words</b>	Graphs and plots were not clearly labelled. OR Graphs were not clearly formatted and were not of an appropriate size. OR Many grammatical and typographical errors were present. OR The report was not clearly formatted with appropriate space provided around text, headings and figures. OR Page limits were exceeded.		Most graphs and plots were clearly labelled. Most graphs were clearly formatted and of an appropriate size. Some grammatical and typographical errors were present. The report was clearly formatted with appropriate space provided around text, headings and figures. Page limits were not exceeded.		All graphs and plots were clearly labelled. All graphs were clearly formatted and of an appropriate size. No grammatical and typographical errors were present. The report was clearly formatted with appropriate space provided around text, headings and figures. Page limits were not exceeded.