**Assignment for Electrical Fundamentals**

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| **Assessment Task: 2800 Words**   1. Explain the concepts of Ferromagnetic, Paramagnetic and Diamagnetic in relation to materials. Give an example of each type of material and where the properties of each could be utilised. **(30 marks)** 2. Describe the construction of an aircraft Lithium ion battery including how the chemical process is achieved to give its output. Explain the benefits and drawbacks of Li-ion batteries in comparison to Ni-Cad and Lead Acid batteries. **(30 marks)** 3. Give a description of an inductor and explain the effect it has on an AC supply. You should include a graphical element to your explanation. Give an example of where and how an inductor would be used in an electrical circuit. **(30 marks)** 4. Quality of assignment, referencing, diagrams, grammar. **(10 marks)** |
| **Learning Outcomes to be assessed**   1. To demonstrate a knowledge of the principles and concepts of Electrical Fundamentals 2. To demonstrate a knowledge of the principles and concepts of electrical components and machines, both AC and DC, and their application to aircraft engineering |

Main Body of your Assignment

• Introduction

• Main body of work

• Conclusion

• Reference List

• Bibliography