

**TECHNICAL UNIVERSITY OF KENYA**  
**BACHELOR OF ENGINEERING IN ELECTRICAL & ELECTRONICS ENGINEERING**  
**CAT TWO: EEEQ462 CONTROL SYSTEMS ENGINEERING B**

**DATE: November 2018**

**DATE DUE: 29<sup>th</sup> November**

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**INSTRUCTIONS**

1. Attempt all questions.
  2. All workings must be clearly shown.
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**QUESTION ONE**

- a) Define lead-lag compensation. **[2 marks]**.
- b) List three effects of negative feedback **[3 Marks]**
- c) State three effects and two limitations of lag compensators **[5 Marks]**.
- d) Briefly explain “compensating networks” and list three commonly used electrical compensating networks. **[5 Marks]**
- e) State five effects of lead compensation. **[5 marks]**

**\*\* END OF CAT TWO \*\***