

TECHNICAL UNIVERSITY OF KENYA
DIPLOMA IN TECHNOLOGY IN ELECTRICAL AND ELECTRONIC
ENGINEERING

CAT TWO: EEEE343 POWER SYSTEMS A

DATE: NOVEMBER 2018

TIME: 1 HOUR

INSTRUCTIONS

1. Attempt all questions.
 2. All workings must be clearly shown.
-

QUESTION ONE

- a) State three advantages of an A.C transmission system. **[3 marks]**
- b) State five advantages of a D.C transmission system. **[5 marks]**
- c) What is the percentage saving in feeder copper if the line voltage in a 2-wire d.c. system is raised from 200 volts to 400 volts for the same power transmitted over the same distance and having the same power loss ? **[6 Marks]**
- d) List and explain 5 elements of a 3 phase high voltage transmission line **[5 marks]**
- e) Define wireless power transfer. **[1 marks]**

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