MA-106 Linear Algebra: Final Exam

Name: Roll No. _____

Code - D Part I: 20 marks

Tutorial Batch: D₋₋ T₋₋ February 25th 2018

Instructions:

- 1. Failure to follow instructions will result in a deduction of 5 marks.
- 2. Please write your roll no. and tutorial batch on the answer sheet, Part I, and Part II question papers. Exams without roll numbers will be awarded ZERO marks.
- 3. The Part I question paper will be collected at 5:15 p.m. No work is required to be shown for Part I.

Part I Begins

(1) Multiple choice questions: CIRCLE THE CORRECT CHOICE(S). $[6 \times 2 = 12 \text{ marks}]$ There is at least 1, and **may be** more than 1 correct answer. EVEN A SINGLE INCORRECT CHOICE WILL RESULT IN A 0. If only partial no. of correct choices are circled (with no incorrect), you will get 1, and all correct (with no incorrect) choices will be awarded 2.

(a)

(b)

(c)



(e)

(2) Fill in the Blanks.

(c)

(d)

(e)

$$[2+1+1+2+2 = 8 \text{ marks}]$$

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Code - D Part II: 50 marks

Tutorial Batch: D₋₋ T₋₋ February 25th 2018

Instructions:

- 1. Failure to follow instructions will result in a deduction of 5 marks.
- 2. Please write your roll no. and tutorial batch on the answer sheet, Part I, and Part II question papers. Exams without roll numbers will be awarded ZERO marks.
- 3. The Part I question paper will be collected at 5:15 p.m. No work is required to be shown for Part I.
- 4. Anything written on Part II question paper will not be graded, please return only the answer sheets for Part II.
- 5. Full Marks will only be allotted to COMPLETE and CORRECT answers.
- 6. Show all your work for full marks. Answers without justification will be given 0 marks.

PART II BEGINS

(3) State whether the following are true or false. If true, give a proof, else give a counterexample. Justify. $[4\times 3=\mathbf{12} \text{ marks}]$

[4 marks]

[4 marks]

[2+2+2+3 = 9 marks]

[2+2+2+3+2 = 11 marks]

[1+3+1+2 = 7 marks]

(9)

[3 marks]

PART II ENDS