**SAINTGITS COLLEGE OF APPLIED SCIENCES**

**First internal assessment examination, August 2018**

**Department of BA , Semester 1**

Mathematics for Economics -I

Total : **50 marks** Time: **2 Hours**

**Section A**

*Answer any 5 questions. Each question carries 2 marks.*

1. Define singular matrix. Show that is singular.

2. Define symmetric and non symmetric matrices.

3. Find the determinant of

4. Find 2A+ 4B , where A= and B=

5. Find x and y if +=

6. Find the transpose of

**(5 X 2 = 10 marks)**

**Section B**

*Short essay questions*

*Answer any 5 questions. Each question carries 5 marks.*

7. If A= and B= find the products AB and BA. Show that AB≠BA.

8. If A= B= , C= find 4(A-B+C)

9. If A= and B= , (i) Find X such that A-X=3B

(ii) Find Y such that A+2Y=4B.

10. Solve the equations 2x-3y=3, 4x-y=11 using Cramer’s rule.

11. If A= B= verify that =

12. Find the adjoint of the matrix A=

**(5 X 5 = 25 marks)**

**Section C**

*Long essay questions*

*Answer any 1 question. It carries 15 marks.*

13. Solve the equations 3x+y+z=8, x+ y +z=6, 2x+y-z=1 using matrix method

14. Solve the equations using Cramer’s rule.

**(1 X 15 = 15 marks)**

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