**GRAND TEST #1**

1.Show that: + =

2. Solve the following complex equations:(, )(2, 3) = (-4, 7)

3.If , are the roots of the equation x2– 3x + 2 = 0, from an equation whose roots are ( + )2 and

( - )2

4.Show that all cube roots of -125 are -5, -5 and -5, where and are the complex cube roots of unity.

5.Find “k” if one root of 4y2 – 4ky + k + 4 = 0 is zero

6.Solve + = 2

7. Solve x, =

8. = x2 (3a + x)

9. Solve the following system of equations by using the matrix methodx + y = 5, y + z = 7,z + x = 6

10. Which term of the geometric sequence 27, 18, 12, ……. Is

11. Find the value of “n” such that may become the arithmetic means between “a” & “b

12. Which term of the H.P 6, 2, , …… is equal to ?

**MCQS**

If the product of the root of the equation is 2 then the value of p is

A)1 B)2 c)4 D)-4

2.if and then

A)3 B)-3 c)1 D)-1

3.if sum of the root of is equal to the product of root then the value of m is

A) B) c) D)

4.if is the complex cube root of unity then is

A) B) c) D)1

5.The sum of the root of the equation

A)2 B)4 c)8 D)-8

6if A= then the cofactor of is equal to

a)1 b)-1 c)0 d)2

7.if A ,B and C are non singular matrices then

a) b) c) d)ABC

8.if A is a square matrix then =

a) b) c)adjA d)

9.if the matrix is singular then the value of is equal to

a) b)c)d)

10.if the order of two matrices A and B is m x n and n x p respectively then the order of matrix AB is

a)p x m b)n x p c)p x n d)m x p

11. if the matrix is singular then the value of is equal to

a)3 b)-3c)4d)-4

12.the matrix is a

a)row matrix b)column matrix c)singular matrix d)non singular matrix

13…………… is the collection of well defined abd distinct object

A)set B)power C)conjugate D)relation

14.Any thing belong to a set is called ………… of the set

A)element B)object C)member D)all

15.The null set is considered to be a ………… of every set

A)super set B)proper subset C)subset D)improper subset

16.For any set A , =

A){a,b} B){ } C)Null set D)finite

17.A={2,4,8} and B={ are ………….. set

A)sub B)equal C)null D)equivalent

18.=

A) B)U C) D)A