Science College, Kokrajhar

Assignments of B.Sc 2nd Semester Maths (G)

Paper-E201

Abstract Algebra and Matrices

Full marks:30

Last date of submission:12/10/21

Submit to email:mamonidhar@rediffmail.com

Answer any five from the following questions:

(a)Prove that if G is a finite group and and H is a subgroup of G then o(H) divides o(G).

(b)Show that a subgroup of a cyclic group is cyclic.

(c) Write the definition of ring. Show that sum of two rings is again a ring.

(d)If A is an ideal of a ring R with unity such that then show that A=R.

(e)Let R be an integral domain with unity such that R has finite number of ideals. Show that R is a field.

(f)Find the adjoint of the matrix

(g)Solve system of linear equations, using matrix method.