NAME: S.No.   ID:
Maximum Marks: 10   Section:01   Time Allowed: 30 minutes

(1) Given a subset S of R^2 defined by

$$S = \{(x, y) \in R^2 :\ 2x - y = 0\}.$$

(i) Is S a subspace? (Why?)   (ii) Find a basis and dimension of S.
(2) Solve the following system by Gauss-Jordan method:

$$x + y + z = 3$$
$$y + z = 5$$
$$x + y = 7$$