

Q.3 Set. (B) Consider steepest gradient descent (SGD) method for determining  $m - c$  parameter of a straight line passing through the points  $(1, 5)$ , and  $(2, 7)$ . Determine the cost function and one iteration of SGD. Assume step as 0.001, and initial values of slope and intercept as 1.5 and 2.5 respectively. [7]

