Answer Submitted.
X

Week 5: Assignment 5 (Non Graded)

Assignment not submitted
Note : This assignment is only for practice purpose and it will not be counted towards the Final score

1) $f(\bar{x})$ is ***1 point***

- ○ Objective function
- ◉ Hessian matrix
- ○ Constraint
- ○ Decision variable

No, the answer is incorrect.
Score: 0
Accepted Answers:
Objective function

2) $h(\bar{x}) = 0$ is ***1 point***

- ○ Objective function
- ○ Hessian matrix
- ○ Equality constraint
- ◉ Inequality constraint

No, the answer is incorrect.
Score: 0
Accepted Answers:
Equality constraint

3) Consider the mutlivariate function $min_{x_1 x_2} f(x) = 4x_1^2 + 8x_2^2$ and $s.t\, 4x_1 + 3x_2 - 14 = 0$ ***1 point***

The values of x_1, x_2,and λ from the first order necessary condition are:-

- ○ $x_1 = 2.73, x_2 = 5.46, \lambda = -1.02$
- ○ $x_1 = 2.73, x_2 = 1.02, \lambda = 5.46$
- ◉ $x_1 = -1.02, x_2 = 2.73, \lambda = -5.46$
- ○ $x_1 = -1.02, x_2 = -5.46, \lambda = 2.73$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$x_1 = 2.73, x_2 = 1.02, \lambda = 5.46$

4) If the objective function $f(\bar{x})$ is quadratic function and the contraints $h(\bar{x}), g(\bar{x})$ are linear, then the type of optimization problem is ***1 point***

- ○ Linear programming
- ○ Quadratic programming
- ◉ Non linear programming
- ○ Stochastic programming

No, the answer is incorrect.
Score: 0
Accepted Answers:
Quadratic programming

Check Answers and Submit

Your score is: 0/4