

# Assignment -3.

## 3.1

- A one-on-one comparison of each solutions from  $(x_1 - x_{10})$  yields.  $x_1, x_4, x_6, x_8, x_{10}$  which are non-dominated.

3.2 Sorting from lowest to highest, using min-max normalization,  $\frac{x - \min(x)}{\max(x) - \min(x)}$ .

	$[1-5]$ $f_1(x)$	$[70-170]$ $f_2(x)$	$[1-6]$ $f_3(x)$	$[100-600]$ $f_4(x)$
$x_1$	0.5	0.4	1	0.6
$x_2$	0.25	0.5	0.2	0.3
$x_3$	0	0	0.7	1
$x_4$	0.25	0.35	0	0.2
$x_5$	0.5	0.54	1	0.5
$x_6$	0	0.01	0.4	1
$x_7$	1	1	0.4	0
$x_8$	0.5	0.54	1	0.5
$x_9$	0.5	0.54	1	0.3
$x_{10}$	0.25	0.5	0	0.8

Same set of solutions.