CARISTI-LIKE CONDITION.
EXISTENCE OF SOLUTIONS TO EQUATIONS
AND MINIMA OF FUNCTIONS IN METRIC SPACES

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Abstract. In the paper, there were studied Caristi-like conditions that guaranteed existence of a minimum of a function on a metric space. For functions dependent on a parameter, there were obtained conditions for existence of a minimum for each value of the parameter. These results were applied to derive conditions for fixed point and coincidence point existence for mappings in metric spaces. For mappings dependent on a parameter, there were obtained conditions of coincidence point existence for each value of the parameter.

Key Words and Phrases: Caristi-like conditions, coincidence point, fixed point.

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