

# INVESTIGACIÓN

# OPERACIONAL



VOL. 42, NO. 1, 2021

ISSN 0257-4306

## ÍNDICE

55 YEARS PUBLISHING THE JOURNAL

<b>IMPROVED ESTIMATION OF VARIANCE UNDER COMPLETE AND INCOMPLETE INFORMATION</b> Sinha, R. R.; V. Kumar .....	1
<b>MULTI RATES (ONE, TWO AND THREE) OF PRODUCTION INVENTORY MODELS FOR DETERIORATING ITEMS WITH COMPARATIVE STUDY</b> Sivashankari, C. K.; R. Valarmathi.....	9
<b>OPTIMAL REPLENISHMENT POLICY OF RAMP TYPE INVENTORY MODEL UNDER DISCOUNTED PRICE AND IMPRECISION</b> Tripathy, P.K.; S. Sukla .....	29
<b>PRODUCTION INVENTORY MODELS FOR DETERIORATIVE ITEMS WITH CONTINUOUS COMPOUND DEMAND AND GROWTH OF DEMAND</b> Sivashankari, C. K. ; L. Ramachandran.....	46
<b>ESTUDIO CUALITATIVO DE RECONOCIMIENTO DE EMOCIONES EN TIEMPO REAL PARA ATENCIÓN AL CLIENTE UTILIZANDO DEEPLENS FACE DETECTION</b> Quiroz Martínez, M.; A. Balseca Quirumbay; M. Leyva Vázquez.....	63
<b>AN EXTENSION OF THE PARABOLIC DEA FRONTIER TO DEAL WITH INTEGER VARIABLES: A CASE STUDY IN BRAZILIAN RAILWAY STATIONS</b> Serra Moreira, L.; J. C. C. B. Soares de Mello; L. Angulo Meza.....	73
<b>ANÁLISIS COMPARATIVO ENTRE MODELOS DE PROGRAMACIÓN MATEMÁTICA RESTRINGIDA PARA MANEJO DE INVENTARIOS. CASO DE ESTUDIO EN EL CLÚSTER MANUFACTURERO CARTAGENERO</b> Rahmer, B. DE J. ; J. Solana Garzón; H. Garzón Saénz; G. Ortiz Piedrahita.....	84
<b>OPTIMAL INVENTORY DECISIONS WITH ADVANCED SALES FOR DETERIORATING ITEMS</b> Shah, N. H.; P. H. Shah; K. D. Rabari.....	97
<b>A GENERALIZED EXPONENTIAL RATIO-PRODUCT ESTIMATOR FOR POPULATION VARIANCE IN SIMPLE RANDOM SAMPLING</b> Subzar, M-; Y. Ismail.....	104
<b>OVERVIEW ON KERNELS FOR LEAST-SQUARES SUPPORT-VECTOR-MACHINE-BASED CLUSTERING: EXPLAINING KERNEL SPECTRAL CLUSTERING</b> Fernández, Y.; I. Marrufo; M. A. Paez; A. C. Umaquina-Criollo; P. D. Rosero; D. H. Peluffo-Ordóñez.....	113
<b>BOOK REVIEWS/RESEÑAS.....</b>	124
<b>NEWS/ANUNCIOS.....</b>	125