

GENERALIZED THERMOELASTIC PROBLEM CONCERNING SEMI-INFINITE RODS PROBLEM OF STEP IN TEMPERATURE

D. RAJU¹, T. SUCHITRA² AND D. RAMA MURTHY³

¹ Vidya Jyothi Institute of Technology, AzizNagar Gate,
Hyderabad-500 075, Andhra Pradesh, India

² Dr.V.R.K.College of Engineering & Technology,
Nookapally, Jagtial, Karim Nagar, India

³ Professor (Retd.) of Mathematics, U.C.S.,
Osmania University, Hyderabad-500 007, India

Abstract

In this paper, we have solved a generalized thermoelasticity problem concerning to semi - infinite thin rods subjected to temperature distribution. We obtained the solutions for small values of time.

Key Words : *Generalized thermoelasticity, Temperature distribution, Strain - Acceleration, Relaxation Constant, Stress-Strain relations.*

AMS Subject Classification : 34 B 40.