ABSTRACTS
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Organised By DEPARTMENT OF CHEMISTRY FACULTY OF SCIENCE
HELD AT Tilak Dhari College, Jaunpur (U.P.), India
9. The Sturmian theory and its Later Developments

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Here we shall discussed in the main with equation of the type $L(y) \frac{dy}{dx} + \{K \frac{dy}{dx} - G \}y = 0$ in which KG are throughout the close interval $a \leq x \leq b$ continuous real function of the real variable $x$, $K$ does not vanish and may therefore be assumed to be positive and has a continuous first derivative throughout the interval.

10. Certain transformation and summation formulae involving basic hypergeometric functions

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In this paper, an attempt has been made to establish certain transformation and summation formulae by making use of Bailey’s transform.

11. “Two Phase model of Physiological Lubrication Phenomena during the process of articulation in Human Joints”

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The role of synovial fluid is manifold. It is responsible for low friction and low wear rate properties observed in movable joints. This paper is an attempt to study Physiological Lubrication Characteristics and Macromolecular diffusion phenomenon involves during articulation. Introducing the concept of mixture theory of interacting continua for representing the cartilage, viscoelastic fluid model for synovial fluid and realistic values of parameters representing cartilage synovial fluid and diffusion.
coefficients. Analytical expression of load capacity; closure time and solute concentration are obtained. The effect of various parameters, average permeability parameter and diffusion coefficient of the synovial fluid are evaluated and discussed in normal and diseases states. The results are obtained may be helpful for diagnostic purpose.


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The peristaltic flow and heat transfer in a porous medium in an asymmetric vertical channel have been studies by several authors, [Vazravelu et al (2007) Srinivas and Kothandapani (2008), and Vasudev et al (2010)]. Motivated by the above study and in order to assess the applicability of applied magnetic field on physiological flows particularly in model of heat transfer and peristaltic transport of blood flow through porous medium in vascular bed subjected to a transverse magnetic field using Lubrication approach, analytical expression for velocity and pressure rise are obtained. The effect of various parameters and magnetic field are evaluated numerically and discussed in detail.

References:


S.R.Verma