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A MATHEMATICAL MODEL FOR THE STUDY OF TWO LAYERED MODEL OF BLOOD FLOW WITH MICRO-ORGANISMS THROUGH A NARROW DIVERGING VESSEL

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Abstract

This paper is concerned with a mathematical analysis of the flow of blood in two fluid model through capillaries, which diverge at a slow exponential rate. Linearized solutions for velocity, flow rate and apparent viscosity have been determined. It is observed that velocity and flow rate are directly proportional to low Reynolds' number and couple - stress parameter. Flow rate decreases with increase in divergence parameter.