1046-78-295Anjan Biswas* (biswas.anjan@gmail.com), Department of Applied Mathematics and Theoret,
1200 N DuPont Hwy, Dover, DE 19901-2277. Optical solitons with time-dependent dispersion,
nonlinearity and attenuation.

Optical solitons with time-dependent coefficients of dispersion, nonlinearity and attenuation is studied in a non-Kerr law media. The 1-soliton solution is obtained for the nonlinear Schrödinger's equation. In addition, a relation between these coefficients is obtained for the solitons to exist. Finally, the velocity of the soliton is also obtained in terms of these time-dependent coefficients (Received August 25, 2008)