SUBJECT NO-PH60114, SUBJECT NAME- STRING THEORY

LTP- 3-1-0,CRD- 4

SYLLABUS :-

SyllabusIntroduction: Early dual model and the need for strings.Free Bosonic String: Classical bosonic string, Covariant quantization, Light-cone gauge quantizationModern Covarint Quantization: BRST and strings in background field.Worldsheet Supersymmetry: Quantization, No-Ghost theorm, GSO condition, Extended worldsheetsupersymmetrySpacetime Supersymmetry: Superstrings: Open and Closed.D-branes.Text and References:1. Superstring Theory: Vol-I and II by M. Green, J.H. Schwarz, E. Witten, (CambridgeMonographs on Mathematical Physics)2.

1. String Theory, Vol. I and II by J. Polchinski (Cambridge Monographs on MathematicalPhysics)3. 2. A first course in string Theory by B. Zwiebach (Cambridge)