2.17 30297 TRANSMISSION & DISTT. OF ELECT.

UNIT 1 SUPPLY SYSTEM

introduction, electrical supply system, comparison between DC and AC systems for transmission and distribution, comparison between overhead and underground systems, various systems of transmission of electrical power.

UNIT 2 CORONA

introduction, factors affecting corona, advantage and disadvantage of corona, visual critical voltage, corona power loss,, methods of reducing corona effects, voltage limitation of lines, overhead lines insulators,

UNIT 3 TRANSMISSION LINE PARAMETER

introduction, line résistance, skin effect, line inductance, proximity effect, capacitance of single phase overhead lines, electric field and potential difference, bundled conductors, effect of earth on the capacitance of single phase overhead lines

UNIT 4 PERFORMANCE TRANSMISSION

performance of short and medium transmission lines, performance of long transmission lines, underground cables, surge impedance, surge impedance loading, transmission line with series, constant voltage transmission, equivalent T network of along transmission line

UNIT 5 DC TRANSMISSION

introduction, classification of Distribution system, Two wire DC distribution, AC Distribution, insulation resistance of a system, interfence of power lines with neighboring communication lines, high voltage direct current, extra high voltage ac transmission

Reference Books:

1. Transmission and Distribution of Electrical Power by J.B.Gupta