7 <sup>th</sup> Semester RML7D005	Clean Coal Technology	L-T-P 3-0-0	3 Credits
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Module-I: (10 hours)

Introduction to clean coal technology: Modern precombustion coal cleaning methods including biological and chemical cleaning methods.

Module-II: (10 hours)

Clean coal combustion technology: AFBC, Circulating Fluidized Bed Combustion, Slagging combustion. Pressurized Fluidized Bed Combustion. Sox and NOx control strategies during combustion.

Module-III: (10 hours)

Post Combustion Technology for control of SOx, NOx and Particulate Matter Coal gasification combined cycle method. SPM and its control methods and equipment UCG, CBM, CWM/COM

Module-IV: (06 hours)

Integrated coal gasification combined cycle and coal combustion combine cycle methods.

## **Books:**

[1 CleanCoalTechnologiesforPowerGenerationbyP.JayaranaReddy,Taylor&Francis

[2 CleanCoal(RenewableEnergyResearch,DevelopmentandPolicies)byKlaesG.Douwe),NovaScie ncePublishersInc