

AMC- 13 : RIVER ENGINEERING

1. RUN OFF

Introduction, Hydrograph, Runoff Characteristics Of Streams, Yield (Annual Runoff Volume), Flow-Duration Curve, Flow-Mass Curve, Sequent Peak Algorithm, Droughts, Surface Water Resources Of India

2. STREAM FLOW MEASUREMENT

Introduction, Measurement of Stage, Measurement Of Velocity, Dilution Technique Of Stream flow Measurement, Electromagnetic Method, Ultrasonic Method, Stage-Discharge Relationship, Extrapolation Of Rating Curve, Hygrometry Stations

3. FLOODS

Introduction, Rational Method, Empirical Formulae, Unit Hydrograph Method, Flood-Frequency Studies, Gamble's Method, Log-Pearson Type Iii Distribution, Partial Duration Series, Regional Flood Frequency Analysis, Limitations' Of Frequency Studies, Design Flood, Design Storm, Risk, Reliability And Safety Factor

4. FLOOD ROUTING

Introduction, Basic Equations, Hydrologic Storage Routing, Attention, Hydrologic Channel Routing, Hydraulic Method Of Flood Routing, Routing In Conceptual Hydrograph Development, Clark's Method Formula, Nash's Conceptual Model, Flood Control, Flood Forecasting, Flood Control In India