

DEPARTMENT : CIVIL SEMESTER : 4TH

SUBJECT NAME:FLUID MECHANICS AND HYDRAULICS

SUBJECT CODE: 3140611

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FLUID MECHANICS AND HYDRAULICS

Assignment No: 2

Open Channel Flow

- 1. Describe in detail: Classification of open channel flow.
- **2.** What is hydraulic mean depth? Derive expression of hydraulic mean depth for rectangular section, triangular section.
- **3.** Derive an equation for most economical section for rectangular section, trapezoidal section.
- 4. Describe in detail: average shear stress for uniform flow.
- **5.** Describe in detail: Specific energy diagram.
- 6. Describe in detail: 1. Critical depth, 2. Critical velocity, 3. Alternate depth.
- 7. Differentiate between pipe flow and open channel flow.

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