

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 100856

Roll No.

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B.TECH.

Theory Examination (Semester-VIII) 2015-16

RIVER ENGINEERING

Time : 3 Hours

Max. Marks : 100

Section-A

Q1. Attempt all parts. All parts earn equal marks. Write answer of each part in short. (2×10=20)

- (a) Write about River morphology.
- (b) Define meandering.
- (c) List the causes of meandering.
- (d) List the causes for instability of rivers.
- (e) Write about Rivers and restoration structures.
- (g) Give the channel geometry data of rivers.

- (h) List the bio engineering techniques of rivers.
- (i) List the river training works.
- (j) How are the rivers protected from erosion?

Section-B

Q2. Attempt any 5 questions from this section. (10×5=50)

- (a) Explain the mechanics of alluvial rivers.
- (b) Write about Delta formation and control.
- (c) Explain the river channel patterns.
- (d) How the Natural Channel Design analyzed?
- (e) Explain in detail the design of guide band.
- (f) How are the Bridges with reduced waterway are protected.
- (g) Explain socio cultural influence on stream restoration.
- (h) Explain in detail about embankment and spurs.

Section-C

Note: Attempt any 2 questions from this section. (15×2=30)

- Q3. (a) Explain the behaviour of Rivers in detail in various types of soil.
- (b) Explain the Characteristics and shapes of meanders and how are they controlled.
- Q4. (a) Explain the classification of rivers in detail.
- (b) Explain about the Bio-engineering Techniques.
- Q5. (a) Explain in detail about the Classification of River Training?
- (b) Explain in detail the Flood protection works.

