

Paper Id:

100744

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B.TECH
(SEM VII) THEORY EXAMINATION 2019-20
RIVER ENGINEERING

Time: 3 Hours**Total Marks:70****Note:** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A****1. Attempt all questions in brief.****2 x 7 = 14**

a.	Differentiate between Himalayan and Non-Himalayan river.
b.	Define deltas.
c.	Define time series analysis.
d.	Explain bed load.
e.	What do you mean by river erosion.
f.	Explain the purpose of Groynes.
g.	Define the use of guide bank.

SECTION B**2. Attempt any three of the following:****7x3=21**

a.	The discharge passing through a incised river is 72 m ³ /sec. Determine meander width.
b.	Explain the necessity of river restoration structures.
c.	With the help of neat sketch explain bed forms.
d.	Differentiate between attracting and repelling groynes.
e.	Explain the various purposes for which river training is required.

SECTION C**3. Attempt any one part of the following:****7x1=7**

a.	With the help of a neat sketch explain sedimentation.
b.	Explain the various classification of river.

4. Attempt any one part of the following:**7x1=7**

a.	Differentiate between flashy and virgin river.
b.	Explain the structural and non structural majors for flood management.

5. Attempt any one part of the following:**7x1=7**

a.	Elaborate the mechanics of alluvial river.
b.	Explain the formation of delta.

6. Attempt any one part of the following:**7x1=7**

a.	Explain river restoration.
b.	Explain the term training for discharge.

7. Attempt any one part of the following:**7x1=7**

a.	Differentiate between permeable and impermeable spurs.
b.	Enlist and explain various types of river training methods.