

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Basic Civil Engineering****Sub. Code: 108718****Day and Date: Thursday ,29-01-2026****Total Marks: 60****Time: 10:30 AM To 01:00 PM**

- Instructions:**
1. All questions are compulsory
 2. Assume suitable data wherever necessary and mention it boldly
 3. Draw neat labelled diagrams wherever necessary
 4. Figures to the right indicate full marks

Q1) Solve any three Questions [15]

- a. Explain the scope of Civil Engineering [5]
- b. Differentiate between Substructure and Superstructure? [5]
- c. State the various principles of planning and explain any one with sketches. [5]
- d. Convert the QB's to WCB [5]
 1. QB of AB = S 30° 15' W
 2. QB of BC = S 41° 30' E
 3. QB of CD = N 29° 15' E
 4. QB of DE = N 50° 30' W
 5. QB of EF = S 10° 15' E

Q2) Solve any three [15]

- a. Write a note on septic tank. [5]
- b. What is the need of sewage treatment plant ? [5]
- c. Explain with sketches four main layouts of water distribution systems [5]
- d. Explain the different sources of water in detail. [5]

Q3) Solve any three [15]

- a. Define transportation engineering and explain different modes of transportation. [5]
- b. Distinguish between rigid pavement and flexible pavement. [5]
- c. Draw a typical cross section of road in cutting and embankment showing details. [5]

d. What are the requirements of the ideal permanent way? [5]

Q4) Solve any three [15]

a. Draw a typical layout of dam and explain components. [5]

b. What is Irrigation? What are the types of irrigation system , explain anyone [5]

c. State Importance of rainwater harvesting [5]

d. Write a note in watershed management [5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

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