

Seat No. **MAR\_APR 2025 SUMMER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Basic Civil Engineering****Sub. Code: 71813/72503****Day and Date: JUNE ,16-06-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM**

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

**Special Inst.:** Solve any three questions from Q.1 to Q.4 and any three questions from Q.5 to Q.8

- Q1) A.** "Civil Engineering is very much relevant to other branches of engineering" [5]  
 Explain this statement.
- B.** Enlist various principles of building planning. Explain privacy, sanitation in details [6]
- Q2) A.** Explain with neat sketch different elements of super structure [6]  
**B.** What is bearing capacity of soil ? Explain methods to improve bearing capacity of soil ? [6]
- Q3) A.** Write down uses of wood and aluminium in building construction [6]  
**B.** Differentiate between Load bearing structure and framed structure [6]
- Q4) Write short note(Solve any three) [12]**
- a.** Types of Loads in Building design [4]  
**b.** Branches of Civil engineering [4]  
**c.** Components of Structure [4]  
**d.** Seasoning of timber [4]
- Q5) A.** Define the term bearing of a line and explain types of bearing ? [5]  
**B.** What is chaining, ranging and offsetting ? [6]
- Q6) A.** Define the terms: Datum Surface, Elevation, Bench Mark, Line of Collimation, Change point, FS [6]  
**B.** The following consecutive readings were taken with a level on a sloping ground. [6]  
 0.600, 1.235, 1.860, 2.575, 0.235, 0.915, 1.935 and 2.870.  
 The reduced level of the first point was 192.125 m. Calculate the reduced levels of points by Rise and fall method. Apply the check

- Q7) A.** Explain types of road pavements ? [6]  
**B.** Explain the construction of earthen dam along with neat sketch [6]
- Q8)** Write short note(any three) [12]
- a.** Errors in compass surveying [4]
- b.** Characteristics of Contour [4]
- c.** Methods of reductions of levels [4]
- d.** Types of levelling [4]

## **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.

- 1] (1154) B.Tech. CBCS (72503) Basic Civil Engineering Part 1 SEM 2
- 2] (1154) B.Tech. CBCS (71813) Basic Civil Engineering Part 1 SEM 1