

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****12609 Bachelor of Technology (NEP-2.1)****Sub. Name: Basic Civil Engineering****Sub. Code: 114848****Day and Date: Thursday ,29-01-2026****Total Marks: 60****Time: 10:30 AM To 12:30 PM****Instructions:****Special Inst.: 1.Q.1 is compulsory****2. Attempt any three questions from question no.2 to 5.****Q1) Solve following MCQ.****[6]**

- i. The branch of civil engineering that deals with the design, construction, and maintenance of roads and highways is known as
(CO-1, BL-1,2,3)
- A. Irrigation engineering
 - B. Geotechnical Engineering
 - C. Transportation Engineering
 - D. Structural Engineering
- ii. What is the term for the placing of various rooms or units of a structure in proper correlation with their functions and proximity?
(CO-2, BL-1,2,)
- A. Aspect
 - B. Circulation
 - C. Grouping
 - D. Sanitation
- iii. Which of the following is not required for chain surveying?
(CO-3, BL-1,2)
- A. Dumpy level
 - B. Pegs
 - C. Arrows
 - D. 20 m chain
- iv. Disinfection Removes
(CO-4, BL-1,2)
- A. Colour
 - B. Odour
 - C. Bacteria
 - D. Turbidity
- v. Pavement consisting of bitumen or asphalt is known as:

(CO-5, BL-1,2)

- A. Flexible Pavement
- B. Rigid Pavement
- C. Composite Pavement
- D. Graval Pavement

vi. According to the Hydraulic design, the dams are classified as

(CO-4, BL-1,2)

- A. diversion and detention Dams
- B. storage and diversion dams
- C. overflow and non-overflow dam
- D. arch and buttress dam

Q2) Solve the following **[18]**

a. Explain Significance of civil engineering in today's world? **[6]**
(CO-1, BL-1,2)

b. Explain the main components of building along with neat sketch. Also write in detail about construction material and functions? **[6]**
(CO-2, BL-1,2)

c. Explain the properties and uses of Stone and brick? **[6]**
(CO-2, BL-1,2)

Q3) Solve the following **[18]**

a. Define Surveying ? Explain Principles of surveying ? **[6]**
(CO-3, BL-1,2)

b. Explain different terminology used in levelling ? **[6]**
(CO-3, BL-1,2)

c. Which are the various types of sewerage systems ? **[6]**
(CO-4, BL-1,2)

Q4) Solve the following **[18]**

a. As per IRS Give detail Classification of roads ? **[6]**
(CO-5, BL-1,2)

b. What is dam ? Give detail classification of dam ? **[6]**
(CO-4, BL-1,2)

c. Write a note on: Roof top rainwater harvesting **[6]**
(CO-4, BL-1,2)

Q5) Solve the following

- a. Differentiate between load bearing structure and framed structure? **[6]**
(CO-2, BL-1,2,3,4)
- b. Discuss various sources of water for water supply scheme ? **[6]**
(CO-4, BL-1,2)
- c. The following fore bearings are observed in a closed traverse ABCDA while surveying around a building. Calculate the included angles. **[6]**
(CO-3, BL-1,2,3,4)

FB	LINE
AB	124°
BC	60°
CD	318°
DA	200°

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.

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