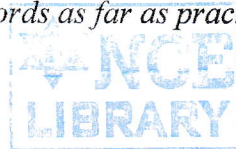


TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2083 Baishakh

Exam.	Back (New Course)		
Level	BE	Full Marks	30
Programme	BCE	Pass Marks	12
Year / Part	II / II	Time	1½hrs.

Subject: - Building Technology (ENCE 255)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.



1. Describe in short history of building technology and Nepalese building. [2]
2. What do you mean by thermal comfort and thermal performance of a building? Explain principles of planning of building. Classify types of sound. [1+3+1]
3. a) Define rubble masonry and describe the procedure of painting in new woodworks. [1+2]
b) Describe slip formwork and compressed stabilized earthen block masonry. Differentiate precast and cast-in-situ construction. [3]
4. a) Differentiate stairway and staircase. Explain the term pitch, eaves, hip and purlin of a roof with sketch. [1+2]
b) Describe the fixing process of door. What are the different wiring systems used in building? [2+2]
5. a) -What are the advantages of double scaffolding over single scaffolding for wall construction? How do you achieve thermal insulation of exposed walls? [2+2]
b) Differentiate structural and non-structural cracks. What are the methods of demolition of structure? [1+2]
6. What are the techniques and strategies for construction of sustainable building? [3]

TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
Examination Control Division
2082 Bhadra

Exam.	Regular (New Course)		
Level	BE	Full Marks	30
Programme	BCE	Pass Marks	12
Year / Part	II / II	Time	1½ hrs.

Subject: - Building Technology (ENCE 255)

- ✓ Candidates are required to give their answers in their own words as far as practicable.
- ✓ Attempt All questions.
- ✓ The figures in the margin indicate Full Marks.
- ✓ Assume suitable data if necessary.

1. Explain building types based on storey and height. Provide two examples of structures that are not considered as building. [2]
2. Define lighting. Describe types of mechanical ventilation. Are there any acoustic defects other than reverberation and echoes? Explain in short. [3+2]
3. a) What do you mean by quarry faced ashlar masonry? Explain the factors to consider while excavating trenches for pipes. [1+2]
- b) Critically describe concrete 3D printing, autoclaved aerated cement block and expansion joint. [3]
4. a) Differentiate ladder from staircase. Explain different types of doors based on working mechanism specifying their uses. [1+3]
- b) Draw a labelled sketch of suspended floor. What are the components of lightning arrester system in building? [3]
5. a) Describe different damp proofing methods and pre-construction anti-termite treatment process. [2+2]
- b) Differentiate retrofitting from repair. How do you achieve fire-resistance construction for wall openings? [1+2]
6. Define sustainable building. Explain the common rating systems used to evaluate sustainability in building. [3]
