

Exam	Regular		
Level	BE	Full Marks	60
Programme	BCE	Pass Marks	24
Year / Part	III / II	Time	3 Hrs

Subject:- Professional and Social Engineering (ENCE 355)

- ✓ 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**.

1. a) Describe the relationship between early civilization and engineering practices and explain how engineering has been shaped by society. [6]
b) Discuss major global and regional environmental issues and explain how sustainable technologies can help address them. [6]
2. a) Define professional ethics, responsibility, liability, and negligence in engineering practice with suitable examples. [4]
b) An engineer must choose between meeting a project deadline and carrying out an essential safety-related check. Using an ethical decision-making approach, explain how the engineer should resolve the situation. [8]
3. a) Write down the role of the Nepal Engineering Council (NEC) and professional associations in regulating engineering practice in Nepal. [5]
b) What is labor law and occupational safety? How arbitration and other conflict-resolution techniques can help resolve engineering disputes? [2+5]
4. Explain the importance of professional correspondence, teamwork, leadership, and Continuing Professional Development (CPD) for an engineer. [6]
5. a) Define social engineering. What is the importance of social inclusion in engineering decision making? [4]
b) What is Corporate Social Responsibility? State briefly how effective stakeholder communication can improve an infrastructure project. [4]
6. a) Explain the engineer's role as an agent of change and write down the importance of responsible engineering intervention in society. [4]
b) Define Sustainable Development Goals (SDGs). Discuss the need to balance technical and social expectations in engineering projects and relate this to engineers' contribution to the SDGs. [1+5]

****BEST OF LUCK ****