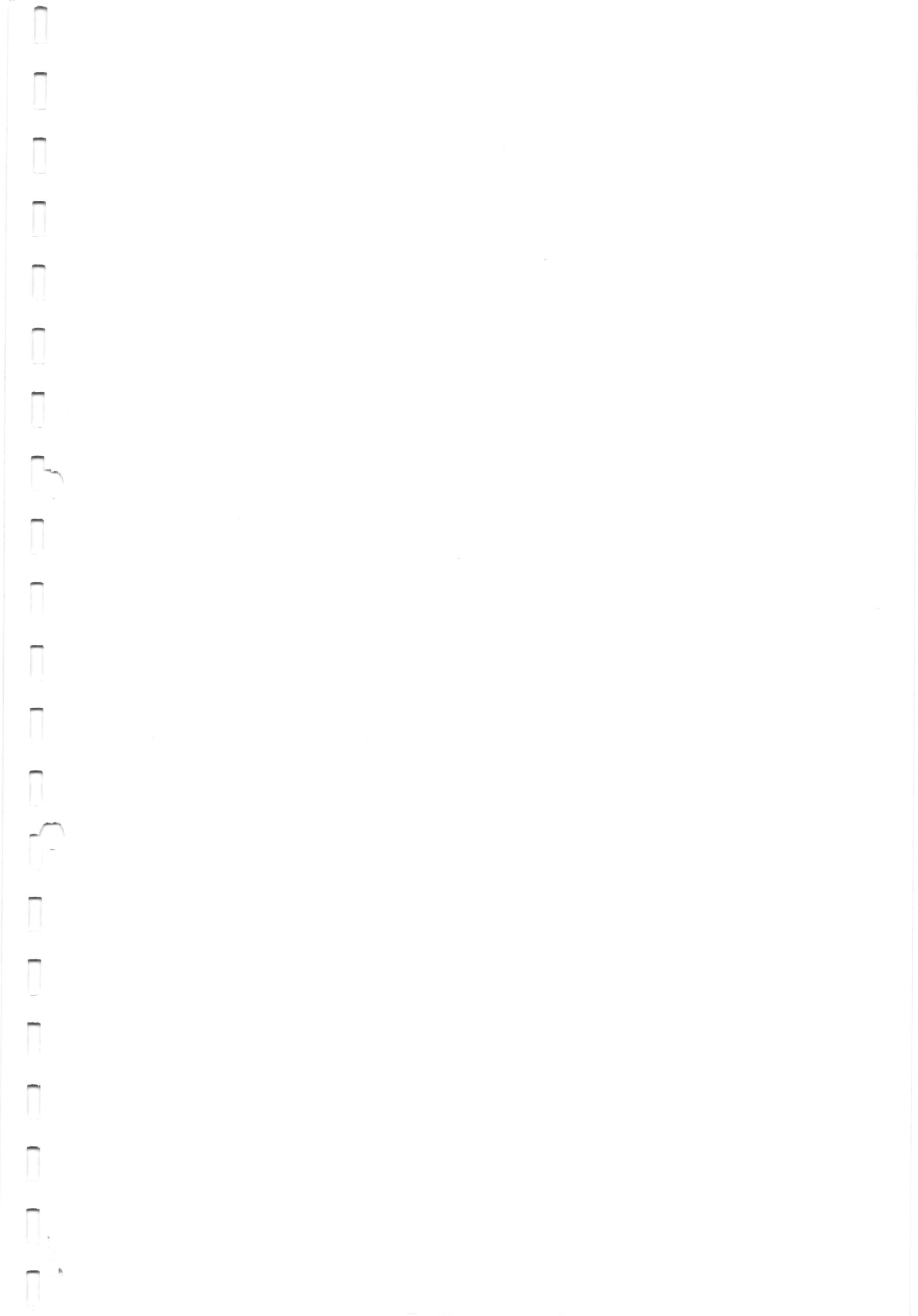






MAR 07 2018

24. Dead ice:
25. Moraine:
26. Surging glacier:
27. Permafrost:
28. Water equivalent:
29. Oxygen isotope:
30. Supra-glacier pond:



KATHMANDU UNIVERSITY  
End Semester Examination  
February/March, 2018

MAR 07 2018

Level : B. Sc.  
Year : IV  
Time : 2 hrs. 30 mins.

Course : ENVS 423  
Semester : I  
F. M. : 55

SECTION "C"

(Long answer questions)  
[3 Q. × 7 = 21 marks]

Attempt *ANY THREE* questions of the following:

1. How are glaciers and glacial lakes formed? Explain in detail.
2. What are the main two areas of a glacier? Explain different zones in an accumulation area of a glacier.
3. What are the main components of heat budget calculation on a glacier surface? Write in detail with equations.
4. What does study in ice core of a glacier? Why is it important in glaciology?

SECTION "D"

(Short answer questions)

5. Differentiate between *ANY FOUR* of the following [4 Q. × 4 = 16]
  - a) Glacier and glacial lake
  - b) Englacial and subglacial hydraulic systems
  - c) Summer accumulation type and winter accumulation type glaciers
  - d) Wet snow zone and superimposed ice zone
  - e) Permafrost and rock glacier
6. Write short notes on *ANY THREE* of the following. [3 Q. × 4 = 12]
  - a) Snow measurement techniques
  - b) Glacier mass balance
  - c) Ice flow
  - d) Density of snow and ice
7. Give reasons why [2 Q. × 3 = 6]
  - a) Nepalese glaciers do not surge.
  - b) Temperate glaciers are not suitable for ice core studies.

