

EASTERN UNIVERSITY, SRI LANKA

FACULTY OF AGRICULTURE

THIRD YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE -- 2005/2006

AEN 3102 – SOIL AND WATER CONSERVATION (1:15/00)

Answer all questions

Time allowed: 1 hour

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01. (a) Enumerate the biological factors affecting soil erosion.  
(b) Briefly describe at least four mechanical protection works used to reduce soil erosion.  
(c) Briefly discuss the specialized forms of soil erosion.  
(d) Comment on the followings;  
i. "Soils with clay particles are less prone to erosion".  
ii. "Mechanical protection works are usually confined to arable land".
02. (a) List the processes of sediment transport.  
(b) Write a brief account on "the methods used to measure the raindrop size".  
(c) Calculate the  $EI_{30}$  and  $KE_{>25}$  indices of Rainfall erosivity for the storm data given below; ( $I_{30} = 20$  mm/hr)

Rainfall Intensity (mm/hr)	Amount of rainfall (mm)
0-25	30
25-50	25
50-75	15
>75	10