## EASTERN UNIVERSITY OF SRI LANKA THIRD YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE-2005/2006 (August 2015)

## AEN 3201 SOIL AND WATER CONSERVATION

## **External Degree - Repeat**

Answer all questions. Time: One hour

01. (a) List the methods to estimate erosivity from rainfall data.

(b) Calculate the EI 30 index of Rain fall erosivity for the storm data given below

| • | Intensity(mm/hr)      | 0-25       | 25-50       | 50-75       | >75           |                    |
|---|-----------------------|------------|-------------|-------------|---------------|--------------------|
|   | Depth (mm)            |            | 30          | 25          |               |                    |
|   | (Note: $KE = 119 + 8$ | 7.3 log I, | 1 30 = 20 m | nm/hr, when | n KE of RF in | J/m <sup>2</sup> ) |

(c) Briefly describe the importance of plants in preventing soil erosion

02. (a) List the factors that influence on soil erodibility

(b) Give the different types of gullies

(c) Briefly discuss the mechanical protection works to prevent runoff in hilly areas

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(d) Describe the factors affecting erosion caused by water