



SLIATE

SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

(Established in the Ministry of Higher Education, vide in Act No. 29 of 1995)

Higher National Diploma in Building Services Engineering/Higher National Diploma in Civil Engineering/ Diploma in Electrical Engineering/ Diploma in Mechanical Engineering

Third Year, 2nd Semester Examination – 2016

English for Technology VI / Essentials of Professional Communication Skills

Instructions for Candidates:
Answer four (04) questions.
Question no.1 is compulsory.

No of pages : 04
No of Questions : 05
Time : Two (02) hours

Question 01

Write an essay on one of the following topics in not less than 300 words.

- (1) The role of innovations in the economic development of Sri Lanka.
- (2) Barriers to the expansion of state sector industries in Sri Lanka.
- (3) Impact of technology on Sri Lankan education system. (25 Marks)

Question 02

(A) A team of seismologists and civil engineers visits the site of a major bridge, damaged by earth quake. As the secretary to the ministry of disaster management draft a memo to the director of the disaster management (planning) branch in the ministry, to refer to the report below and design a suitable action plan to safeguard the area. Clearly instruct to include details of the required manpower, professional staff, equipment and budget by the end of the month. (15 Marks)

Hiniduma Bridge – Earthquake damage
Risk of further quakes in the area

The area concerned is very prone to earth tremors and two major earthquakes (more than 5 on the Richter scale) had been reported in the last thirty years before the recent one. It is therefore quite likely that another quake will affect the area in the next twenty years. It is difficult to predict the exact time of such a quake. However, the history of the area suggests a future earthquake of more than 7 on the Richter scale is highly improbable. However small tremors of less than 2.5 are considered practically certain.

Present condition of the bridge

The bridge sustained serious structural damage in the recent earthquake. Any further tremor in the next few days, including one as low as 2.5 on the Richter scale, is bound to result in further damage and the bridge might actually collapse.

Recommendations

It is advised that the bridge be demolished and replaced. This is sure to last over 15 months. Present cost estimates top Rs 30 million.