



RAJARATA UNIVERSITY OF SRI LANKA

FACULTY OF APPLIED SCIENCES

B.Sc. in Applied Sciences

Third Year – Semester II Examination – July 2020

BDC 3202 – ENVIRONMENTAL IMPACT AND RISK ASSESSMENT

Time: Two (02) hours

Answer **FOUR (04)** questions.

- 1) a) State the purpose of the EIA (Environmental Impact Assessment) process. **(30 marks)**
 b) Explain briefly the immediate and long term objectives of EIA. **(70 marks)**
- 2) a) Answer the following questions based on the given case study **(70 marks)**

A car washing and lubricating company has been operating for several years (more than 10 yr) in a terrain with the following characteristics: porous, filterable with a phreatic (aquifers) level near to the surface (1.5 m depth). The company is located close to an estuary branch into which they discharge all the disposals and waste generated by this activity. These disposals contains a high level of oils and greases. All the dumping from the car maintenance goes directly into the soil since there are no palettes or gutters. The lubricating company operates for 20hrs for seven days per week. Due to complain by the local residents, Central Environmental Authority (CEA) has decided to carry out EIA and you have been appointed as the consultant.

- i. What type of environmental evaluation has to be performed by the CEA according to this case ?
- ii. Giving reasons, suggest the suitable composition of professionals that will be a part of the consultancy group performing the EIA?
- iii. Mention **three (03)** environmental impacts of this project.

- iv. Discuss **three (03)** mitigation measures you will propose as part of your Environmental Management Plan to mitigate the impacts identified in **part iii**.
- b) Explain briefly the advantages and disadvantages of Matrix method used in the EIA procedure. **(30 marks)**
- 3) Citing suitable examples, explain “Screening” in the EIA process. **(100 marks)**
- 4) Discuss the role, methods and need for public involvement in the EIA process. **(100 marks)**
- 5) Explain in detail the role of mitigation measures for a successful EIA. **(100 marks)**

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