



THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

DEPARTMENT OF CIVIL ENGINEERING

SECOND SEMESTER EXAMINATIONS – 2021

CEME538 - MINING WASTE MANAGEMENT

MASTER IN SOLID WASTE & RESOURCE MANAGEMENT

Thursday 28th OCTOBER 2021 – 10:00 AM to 12 NOON

VENUE: C002 – CIVIL ENGINEERING DEPARTMENT

TIME ALLOWED: 2 HOURS

INSTRUCTIONS FOR STUDENTS:

- 1. WRITE YOUR NAME AND ID NUMBER CLEARLY ON THE FRONT PAGE OF THE ANSWER SHEET.**
2. All answers must be written on the answer booklet provided. No other written material will be accepted.
3. Notes and handouts are not allowed. MOBILE PHONE is not allowed.
4. Maximum Marks: 100.
5. Answer any **FOUR** questions. All questions carry equal marks i.e. 25 marks.
6. Number of pages is 2 including Cover page.

Q1) Describe the role of following studies in mining waste characterization.

- (i) Mineralogical study (ii) Chemical reactions in waste dumps

Q2) What are environmental hazards that might be encountered in mining industry operations?

Q3) Write an essay about current status of mining waste management in the developing world.

Q4) Discuss in detail about the techniques used to clean up the polluted mine drainage.

Q5) Describe pollution prevention and abatement techniques of mining wastes in the following cases

- (i) Generation of polluted mine drainage.
(ii) Clean up the polluted mine drainage.