UNIVERSITY COLLEGE TATI

UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET	
COURSE CODE	: BME 4082
COURSE	: INDUSTRIAL SAFETY MANAGEMENT
SEMESTER/SESSION	: 2-2024/2025
DURATION	: 3.0 HOURS

Instructions:

1. This booklet contains three **(3)** questions. Answer all questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise up your hands and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

THIS BOOKLET CONTAINS 3 PRINTED PAGES INCLUDING COVER PAGE

Answer all questions.

QUESTION 1

a) **Interpret** the meaning of acceptable risk. (4 marks)

b) **Explain** the following concept of hazard avoidance approaches;

i. The engineering (6 marks)
ii. The enforcement (6 marks)
iii. The psychological (6 marks)
iv. The analytical (6 marks)

QUESTION 2

a) **Interpret** the following table as indicated under OSHA Act, Regulation 1996 - Control of Industrial Major Hazards. (12 marks)

	LD50 (oral) mg/kg body weight	*LD50 (cutaneous) mg/kg body weight*	*LC50 mg/1 (inhalation)*
1.	$25 < LD50 \leq 200$	$50 < LD50 \leq 400$	$0.5 < LC50 \leq 2$

b) **Identify** composition members of safety and health committee at one organization. (8 marks)

c) As a Safety and Health Officer, **illustrate** how administrative duties on all fire and emergency arrangements. (10 marks)

d) **Categorize** six (6) class of industries that require Safety and Health officer as required under OSHA 1994; OSH (Safety and Health Officer) Order 1997. (12 marks)

QUESTION 3

a) One of the key elements / scope discuss under Occupational Health and Safety Management System ISO 45001:2018 is "*Eliminating Hazards and Reducing OH&S Risk*" which stated that consideration shall be given to reducing the risks according to the prioritized hierarchy. **Construct** the prioritized hierarchy pyramid. (6 marks)

b) **Identify** four (4) examples of engineering control that could be implemented in reducing risk. (8 marks)

c) One of the two techniques of risk assessment is the risk assessment matrix. **Illustrate** 5 levels of probability and 5 levels of consequences risk assessment matrix diagram and label the lowest and the highest risk level. (16 marks)

----------**End of question**----------

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Criteria	Marks
All question answered will be marked according to the answer scheme	/100