

UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE AND ENGINEERING
APS100 FINAL TEST – December 6th 1:30pm-2:30pm
1 HOUR

INSTRUCTORS: D. Kilkenny, M. Stickel, C. Variawa

-----CROWDMARK ID BOX WILL GO HERE-----

****DO NOT REMOVE THE STAPLE****

Do not begin this test unless asked to do so. Do not continue writing once the time is complete. Disregarding these rules will constitute an academic violation.

No unauthorized aids.

PLEASE WRITE CLEARLY AND LEGIBLY

- Students are wholly responsible for the content and quality of this submission.
- Do not separate the pages.
- Writing that is illegible (if we can't read it) will not be graded accurately.
- This is an independent, closed-book assessment.
- Writing in black or blue pen is strongly encouraged.
- Students must include their multiple-choice answers on the separate bubble sheet at the end of the exam to be graded.
- No textbooks, notes, or other aids. The Aid Sheet is the only exception.

Time allotted: **1h 00min**

Part	Maximum Mark
1	14 marks (2 marks per question, 7 questions)
2	16 marks (8 marks per question, 2 questions)
3	20 marks (20 marks per question, 1 question)
Total	50

THIS PAGE IS NOT GRADED AND CAN BE USED FOR ROUGH NOTES

PART 1. [14 marks] - Multiple Choice

ALL MULTIPLE CHOICE QUESTIONS MUST BE ANSWERED ON THE BUBBLE SHEET ATTACHED TO THE END OF THIS EXAM PACKAGE.

Instructions: **Students MUST write their correct response on the final page of the test** (the “bubble sheet”) for their grade to be valid. Do not write your multiple-choice answer on this question sheet as it will not be graded. We are not responsible for students failing to do this.

Important note for Part One: this is the multiple-choice part of the test. Please review your question(s) carefully, and **submit only one (1) most-appropriate response**. Each correct response is worth two (2) marks.

P1 Q1: Given the list below, select which items would be considered academic offenses according to the *U of T Code of Behaviour on Academic Matters*.

- 1. Falsifying documents
 - 2. Using unauthorized aids
 - 3. Impersonating another person
 - 4. Plagiarism and/or submitting work that has been submitted before
 - 5. Assisting another student in committing an offense
- a) Items 1, 4, and 5
 - b) Item 2
 - c) Items 1, 2, 3, and 4
 - d) Items 1, 2, 3, 4, and 5

P1 Q2: Consider the two items below. Select the answer below that best describes plagiarism.

- 1. Using someone else’s ideas or expression of the ideas (e.g. words).
 - 2. Representing the ideas as your own original ideas or failing to attribute the ideas to their proper source using conventional writing styles.
- a) Either item is sufficient to constitute plagiarism.
 - b) Neither item constitutes plagiarism.
 - c) Only item 1 constitutes plagiarism.
 - d) Only item 2 constitutes plagiarism.

P1 Q3: Which of the following is ***false*** regarding positionality?

- a) Positionality affects our intersectionality
- b) Positionality describes our view on the world
- c) Positionality differences often lead to conflict
- d) Positionality is an important consideration in engineering work

P1 Q4: For the statements below, which statement or statements are examples of unethical conduct?

- 1. Reviewing the work of a co-worker with their knowledge
 - 2. Paying a commission to subcontractors to provide an incentive for cost discounts
 - 3. Preparing a contract to procure services
 - 4. Managing a project to avoid the possibility of a product lawsuit
 - 5. Determining whether a contractor should be paid based on inspection of their work
- a) Statement 1
 - b) Statement 2
 - c) Statements 2, 4, and 5
 - d) Statements 2, 3, and 4

P1 Q5: Consider the Professional Engineers of Ontario Code of Ethics. Which of the following statements does this Code state is “the duty of a practitioner to … act at all times with: ”?

- 1. Fairness and loyalty to the practitioner's associates, employers, clients, subordinates and employees
 - 2. Ensure the correct processes, tools, and approaches are applied throughout the engineering design cycle
 - 3. Devotion to high ideals of personal honour and professional integrity
 - 4. Clarity and honesty in all communications
 - 5. Knowledge of developments in the area of professional engineering relevant to any services that are undertaken
 - 6. Fidelity to public needs
- a) Statements 1, 2, 3, and 4
 - b) Statements 1, 3, 5, and 6
 - c) Statements 3, 4, and 6
 - d) Statements 1, 3, 4, and 5

P1 Q6: The Faculty of Applied Science and Engineering conducted a census on their current student population to determine the demographics of engineering students. It was discovered that less than three percent of first year engineering students are Indigenous. As such, the Faculty decided to create an entrance scholarship targeted towards Indigenous students and did targeted outreach at high schools with a high population of Indigenous students to encourage more Indigenous applicants to UofT. This is primarily an example of:

- a) Equality
- b) Diversity
- c) Equity
- d) Inclusivity

P1 Q7: The Pomodoro technique is best described as:

- a) A method of solving challenging problems
- b) An approach for considering the ethical nature of a particular situation
- c) A technique that supports the creation of inclusive spaces
- d) A process for managing one's time and staying focused on a single task

ALL MULTIPLE CHOICE QUESTIONS MUST BE ANSWERED ON THE SHEET ATTACHED TO THE END OF THIS EXAM PACKAGE.

PART 2. [16 marks] – Short Answers

All students are to write their response to P2 Q1 and P2 Q2 in the spaces provided below. The total number of words in each response must not be greater than the size of each box. Please use full sentences in your responses, and answer to the best of your ability. No citations, references, graphics, or tables in your response. This part is worth 16 marks, with 8 marks per question.

P2 Q1: Consider the following situation: *For the first Engineering Strategies and Practice II (APS112) deliverable, your team needs to submit a research proposal. However, you wrote something similar in Engineering Strategies and Practice I (APS111) so you copy and paste your work and change some of the material to be relevant to the new project. A week after submission your team is notified of receiving an academic offence.*

- i) Briefly describe the academic offence that has been committed.
- ii) Describe how the offence was likely detected.
- iii) Describe the importance of not committing such an academic offence.

Write your answer in this box.

P2 Q2: Identify one topic discussed in APS100H1 Lectures and/or Tutorials that you believe to be related to an area of personal strength. Concisely describe how you will best implement this asset as you continue your undergraduate Engineering journey, as well as the importance of sharing this skill in supporting your Engineering colleagues.

Write your answer in this box.

PART 3. [20 marks] – Long Answer

Please select a Learning Outcome from each major category (A, and B).

Then, please describe some of the major topics we discussed in lecture and/or tutorial from these areas, your development in these areas, and how you plan to continue your learning in these areas after the course is complete.

Engineering Community and Co-curricular Opportunities

- A1.** Identify, locate and understand how to utilize resources such as your professors, teaching assistants, academic advisors, and peers to support your academic journey.
- A2.** Recognize how extra and co-curricular opportunities, academic pathways, undergraduate research, and work integrated learning can support your academic success.
- A3.** Describe types of career pathways available to an engineering student and graduate.

Please pick ONE of the Learning Outcomes from the “A” list.

[P3Q1]: I have selected:

Professional Conduct, Equity, Engineering Ethics, and the Engineering Résumé

- B1.** Define academic integrity and the Student Code of Conduct and recognize how it applies to the first-year course experience.
- B2.** Describe the fundamental principles of equity, equality, and inclusion and incorporate these into your practice as a U of T Engineering student.
- B3.** Describe the essential elements of ethics in engineering and professional engineering practice and apply the PEO and IEEE Codes of Ethics to specific scenarios.
- B4.** Recognize important components of an engineering résumé and develop a personal engineering résumé.

Please pick ONE of the Learning Outcomes from the “B” list.

[P3Q2]: I have selected:

Part three continues on the next page...

[P3Q3 20-MARKS]

In the box below, please write an email to the Teaching Assistant (TA) grading your work. The person reading your email is not your TA from your tutorial, but rather, they are the same individual who has been grading all of your work to-date in this course.

In this email, your goal is to *convince the reader* that you understand the two learning outcomes you selected on the previous page.

In writing this email, it is suggested that you describe some of the topics you discussed in lecture and/or tutorial, how you have demonstrated your personal development in these areas with specific examples, what you have yet to learn in these areas, and how you plan to continue your learning in these areas after the course is complete.

Please write your response in the box below. Any writing outside of this box will not be graded. Please write neatly and clearly; *if we can't read it, we can't grade it.*

From:**To:** APS100@engineering.utoronto.ca**Date:****Subject:****Email:**

**THIS PAGE IS NOT GRADED AND CAN BE USED
FOR ROUGH NOTES IF YOU WANT.
THIS PAGE WILL NOT BE READ.**

DO NOT SEPARATE ANY PAGES.