Insert Personal Education Number (PEN) here.

Insert **only** pre-printed PEN label here.

STUDENT INSTRUCTIONS

1. Insert the stickers with your Personal Education Number (PEN) in the allotted spaces above. **Under no circumstance is your name or identification, other than your Personal Education Number, to appear on this booklet.**
2. Ensure that in addition to this examination booklet, you have an **Examination Response Form**. Follow the directions on the front of the Response Form.
3. **Disqualification** from the examination will result if you bring books, paper, notes or unauthorized electronic devices into the examination room.
4. When instructed to open this booklet, **check the numbering of the pages** to ensure that they are numbered in sequence from page one to the last page, which is identified by

   END OF EXAMINATION.
5. At the end of the examination, place your Response Form inside the front cover of this booklet and return the booklet and your Response Form to the supervisor.

TECHNICAL AND PROFESSIONAL COMMUNICATIONS 12

JUNE 2000

COURSE CODE = TPC

Insert **only** hand-printed PEN here.

Ministry use only.

BRITISH COLUMBIA

Question 1:

1. ☐ . ☐

(4)

Question 2:

2. ☐ . ☐

(4)

Question 3:

3. ☐ . ☐

(2)

Question 4:

4. ☐☐ . ☐

(15)

Question 5:

5. ☐☐ . ☐

(35)

TECHNICAL AND PROFESSIONAL COMMUNICATIONS 12

JUNE 2000

COURSE CODE = TPC

GENERAL INSTRUCTIONS

1. Aside from an approved calculator, electronic devices, including dictionaries and pagers, are **not** permitted in the examination room.

2. All multiple-choice answers must be entered on the Response Form using an **HB pencil**. Multiple-choice answers entered in this examination booklet will **not** be marked.

3. For each of the written-response questions, write your answer in the space provided in this booklet.

4. Ensure that you use language and content appropriate to the purpose and audience of this examination. Failure to comply may result in your paper being awarded a zero.

5. This examination is designed to be completed in **two hours**. *Students may, however, take up to 30 minutes of additional time to finish*.

TECHNICAL AND PROFESSIONAL COMMUNICATIONS 12
PROVINCIAL EXAMINATION

		Value	Suggested Time
1. This examination consists of **five** parts:			
PART A:	Communication Concepts	10	8
PART B:	Reading Comprehension	18	25
PART C:	Editing	7	7
PART D:	Design	15	20
PART E:	Case Study	35	60
	Total:	**85 marks**	**120 minutes**

2. A hand-held calculator may be used for this examination; however, computers, calculators with a QWERTY keyboard, and electronic writing pads will not be allowed. Students must not bring any external devices to support calculators, such as manuals, printed or electronic cards, printers, memory expansion chips or cards, or external keyboards. Students may have more than one calculator available during the examination. Calculators may not be shared and must not have the ability to either transmit or receive electronic signals.

3. You may use a ruler or geometry set to create any graphics required for the Design and Case Study parts.

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PART A: COMMUNICATION CONCEPTS

Value: 10 marks **Suggested Time: 8 minutes**

INSTRUCTIONS: For each multiple-choice question, select the **best** answer and record your choice on the Response Form provided. Using an HB pencil, completely fill in the circle that has the letter corresponding to your answer.

Use the following information to answer questions 1 and 2.

Entry 1	Dosanjh, Ranjit. *The Olive Branch*. London: Tiger Books, 1997.
Entry 2	*The Complete Canadian Atlas*. 6th ed. Toronto: University of Ontario Press, 1989.
Entry 3	Chien, Tang and Wong, eds. *Chinese–English Dictionary*. Beijing: Long and Pu, 1999.
Entry 4	Legentil, Collette. *Conquête des Incas*. Renard Publishing, 1986.

1. The correct order for the bibliographical entries above is

   A. Entry 2, Entry 3, Entry 1, Entry 4.
   B. Entry 3, Entry 1, Entry 4, Entry 2.
   C. Entry 3, Entry 2, Entry 1, Entry 4.
   D. Entry 3, Entry 4, Entry 2, Entry 1.

2. Which of the entries has incomplete publication data?

   A. Entry 1
   B. Entry 2
   C. Entry 3
   D. Entry 4

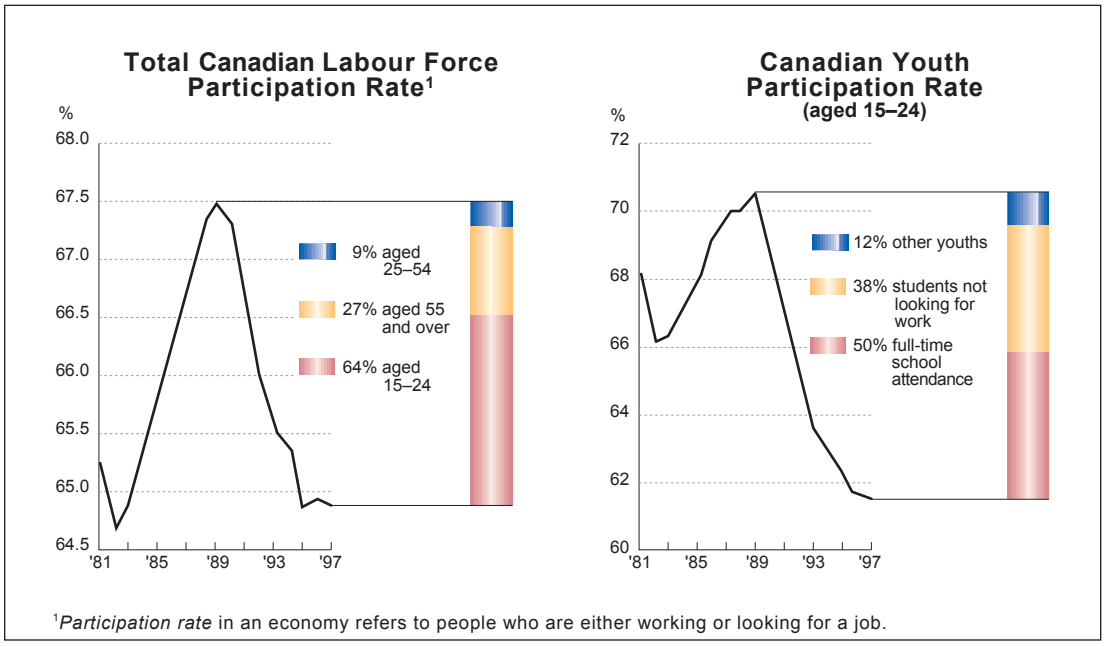
---

3. Standard business letters should always use

   A. single-spacing.
   B. sans-serif fonts.
   C. 14-point font size.
   D. indented paragraphs.

OVER

Use the following charts to answer questions 4 and 5.



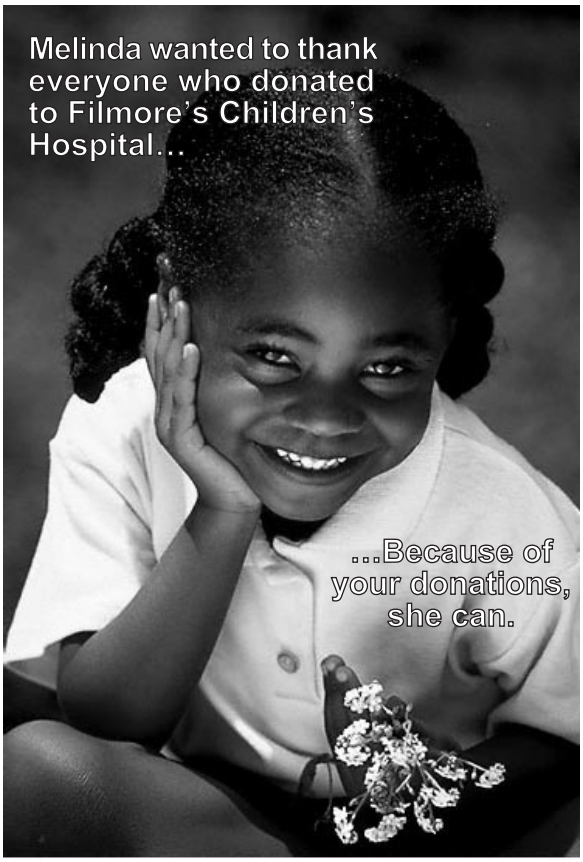
4. What was the approximate decline in the total Canadian labour force participation rate from 1989 to 1997?

   A. 3%
   B. 9%
   C. 27%
   D. 65%

5. Of the decline in the total Canadian Youth Participation Rate from 1989 to 1997, what percentage of 15–24 year-olds decided to attend school on a full-time basis?

   A. 9%
   B. 50%
   C. 64%
   D. not enough information given

Use the following advertisement to answer questions 6 and 7.



This April, British Columbians pledged over $3million † to support sick children through the development of the Family Centre at Filmore's Children's Hospital, providing families with a worry-free place to stay during the illness of loved ones.

Please send your donations today.
New donations greatly appreciated.

†Actual amount received to date: $2.75 million

6. The appeal of the advertisement above is based on

   A. supported claims.
   B. medical evidence.
   C. product endorsement.
   D. manipulation of emotions.

7. The advertisement above contains

   A. italics.
   B. subscript.
   C. serif script.
   D. reversed text.

OVER

8. Direct quotations from the work of another writer should be cited in a

   A. preface.
   B. forward.
   C. bibliography.
   D. parenthetical reference.

9. The primary function of bookmarks in a web browser is to

   A. save a large text file.
   B. search using key words.
   C. keep a list of favourite web site addresses.
   D. speed modem access to World Wide Web sites.

10. All of the following will increase the availability of the computer's memory **except**

    A. installing additional RAM.
    B. closing applications not in use.
    C. altering the speed of the modem.
    D. installing a memory management utility.

PART B: READING COMPREHENSION

Value: 18 marks **Suggested Time: 25 minutes**

INSTRUCTIONS: Read the following article carefully. For questions 11 to 18, select the **best** answer and record your choice on the Response Form provided.

Designing a Kayak

Knowing what you're getting into is kayak science, not rocket science, and these sleek craft are marvels of modern design.

1 Wind, waves, currents, tide, speed, and acceleration: with every paddle stroke you compensate for a world in constant flux. One day you launch right off the beach in an empty boat, the next you cruise for miles with a month's worth of supplies under your decks. With this huge rainbow of paddling environments spreading out before you, what makes a cruising kayak work?

2 We'll start, like any kayak designer, with a few educated guesses: the total weight of the kayak and its outfitting, the gear and supplies it may carry, and the maximum weight of the paddler. Erring on safety's side, we'll double that weight. Fill an imaginary ball with a volume of water equal to our guesstimated weight. The rigid skin of the ball becomes the skin of our kayak, and when we drain away the water, we have a magnificently unsuitable craft. It will float us and our gear, but it incessantly rolls over with no directional or rotational stability.

3 Our first step is to roll and stretch the skin into a cylinder—about 18 inches in diameter and 12 to 13 feet long. Pop a hole for a cockpit so that the front of the cockpit is at the mid-point of the cylinder. We've now created directional stability.

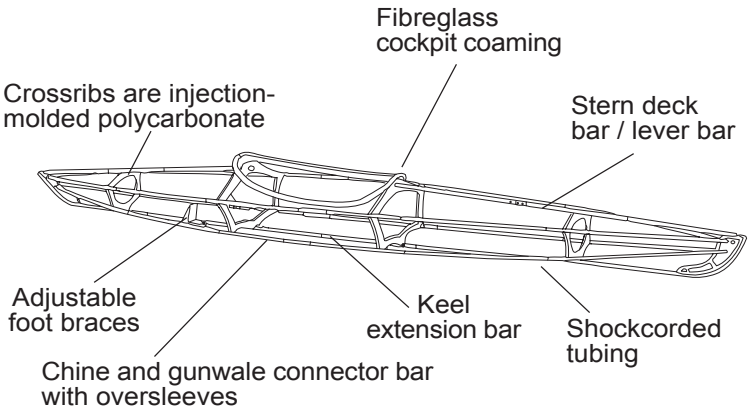
4 Because it's a cylinder, it's still more than willing to spin like a rotisserie. So, put your hands atop the kayak and squish it until it's 12 to 14 inches from keel to deck at the front of the cockpit. As we push the top and bottom closer together, the sides will spread out—to around 24 inches. We'll let the bottom stay in a shallow arch or vee, because a flat panel—plywood, plastic, or glass—will flex under stress, while the tension of a curved shape will help the boat remain rigid.

5 The flatish bottom is not what balances the boat. Visualize the cross section of this squashed cylinder, floating with just a bit of the bottom in the water. A slight tilt from the horizontal puts a lot of bilge in the water with a correspondingly strong righting motion.

6 We now have a kayak that is willing to stay upright but the blunt bow has to go. From the front of the cockpit, elongate the fore section of the hull until it ends in a sharp stem. As you stretch the fore section, the sides come closer together until the curve from the cockpit to the bow is smooth and sleek. The front end of the boat now cuts cleanly into the water, but the back leaves a burbling turmoil of a wake. Run your hand, palm first, through a sinkful of water and you'll get the picture. Grab the back end and stretch it out into smooth curves culminating in a sharp stern. Now the water flows smoothly from bow to stern. With all our stretching, the kayak is now 19 or 20 feet long—and still has just about the same volume as our original ball.

7 Step away from the kayak for a moment and admire our handiwork in profile. The keel line is as straight as the blade of an ice skate and, like a skate, this boat goes straight. The vertical flat surfaces of the bow and stern are a long way from the middle, and the fulcrum effect of this long lever—from midships to the ends—resists any turning motion.

Fig.1
Parts of the kayak



Diagrams from *Feathercraft Folding Kayaks and Accessories.*

You may detach this page for convenient reference.
Exercise care when tearing along perforations.

OVER

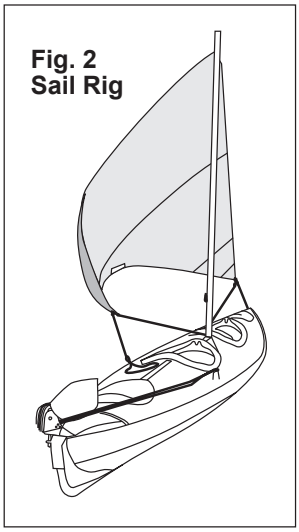


Fig. 2
Sail Rig

8 If we stood over the kayak and looked down, the hull would be shaped like two parentheses joined at the ends: (). When the boat is gliding flat through the water, the resistance is equal on both sides of the centreline. If you tip the kayak to the side, you've immersed the beamiest part of the hull on one side, and in doing so have lifted the other side as well as the bow and stern from the water. The new underwater shape, coupled with the shorter waterline and the reduction in turning resistance in the ends, sends the hull in a curving turn. Centre the boat, on the level, and it goes straight.

9 Once upon a time there were distinct regional differences in a cruising kayak design. "British" or "East Greenland" boats were narrow with a high bow. "Pacific Northwest" kayaks were beamier, with a foredeck that sloped down to a relatively vertical bow. Exaggerate those characteristics and a high, overthrust bow will catch the wind, and your boat will swerve almost uncontrollably downwind. A sharply downsloping foredeck with a low bow is a prescription for spearing into every wave and getting washed down with both green water and spray in almost placid conditions. Ideally, you want a low foredeck to avoid the wind, with enough buoyancy to lift over waves rather than slice into them.

10 Our 12- to 14-inch depth is not all that arbitrary. Much less than that and you wouldn't be able to get your feet and knees up under the deck. Significantly more and you'd be banging your hands and elbows on the cockpit coaming as you attempted to paddle.

11 A 24-inch beam—the widest part of your kayak—is a compromise for a single boat. Beamier than that and you'd need a huge long paddle just to reach the water, and your strokes would devolve into C-shaped sweeps rather than a precise planting and an efficient parallel-to-the-keel power path. A narrower boat, 18- to 21-inch beam, may be great fun to paddle, but it's correspondingly more difficult to balance. Think of a cross section of you and your kayak as a pyramid, with the weight centred up around your sternum. With a narrow base—a narrow kayak—the centre of weight will be beyond the base of the pyramid with just a little tilt, and without swift corrective bracing you'll evolve from a paddler to a swimmer. Conversely, with a very wide boat, you'll find it harder to tilt the boat for an effortless turn.

12 The 17- to 20-foot length of a solo cruising kayak is based on a lot of reality. Within a boat narrow enough to paddle efficiently and low enough to avoid the wind, this length provides the volume and carrying capacity for a reasonable amount of gear. A shorter, equally narrow boat will be overloaded and bog down. A shorter, beamier boat will require more paddling effort and will give you less glide between strokes.

13 Physics governs the displacement hull of our kayak. The maximum efficient speed through the water is a function of length—approximately 1.4 times the square root of the waterline. Other design factors being equal, it is easier to move a longer boat than a shorter one. So why not paddle a 23-foot boat? Because every inch of boat length you slide through the water creates friction. At 23 feet, the increased friction more than washes out the potential increased speed and efficiency. To keep your longer boat from being tossed about by the wind, you'll need to make it narrower and lower—staying within our original buoyancy—and that in turn means a boat more difficult to turn and inherently less stable.

14 What's all this mean? That boat designers know what they're doing with a symmetrical cruising kayak with a 23- to 24-inch beam and an 18-foot length. For most of us, in most paddling conditions, those are the numbers that work.

GLOSSARY

BEAM:	The width measured at the widest point.
BOW:	The front of the boat.
CHINE:	The tube that separates the bottom of the boat from the side of the boat.
COAMING:	The curved lip around the edge of the cockpit.
KEEL:	A strip or extrusion along the bottom of a boat to prevent (theoretically) side-slipping. Also adds rigidity or structural support to the hull.
RUDDER:	Typically a foot-controlled steering device on touring or sea kayaks.
STERN:	The back end of a boat.
WATERLINE:	A line reached by the water along the hull of a boat; the shape of the waterline and the handling characteristics of the boat change as the load changes.

1999 "Complete Guide to Kayak Touring" article by Dennis Stuhaug is reprinted with permission of "Canoe & Kayak" Magazine.
1 (800) MYCANOE or www.canoekayak.com

11. In paragraph 1, the correct definition of “flux” is

    A. fusing together.
    B. flowing in the tide.
    C. unnatural discharge.
    D. changing continuously.

12. In paragraph 2, “erring on safety’s side” means

    A. being cautious.
    B. taking chances.
    C. guessing wrong.
    D. making mistakes.

13. To keep the kayak rigid, the bottom must be

    A. flat.
    B. arched.
    C. cylindrical.
    D. ball-shaped.

14. The bow of the kayak must be curved to

    A. leave a wake.
    B. resist turning.
    C. reduce friction.
    D. balance the boat.

15. The language in paragraph 9 is primarily

    A. plain.
    B. jargon.
    C. colloquial.
    D. metaphoric.

16. Paragraph 11 contains an example of

    A. simile.
    B. allusion.
    C. analogy.
    D. paradox.

OVER

17. In paragraph 11, “you’ll evolve from a paddler to a swimmer” is intended to be

A. satiric.
B. factual.
C. scientific.
D. humourous.

18. The audience **most likely** targeted by this article is

A. home boat builders.
B. kayak manufacturers.
C. people with no kayaking experience.
D. people with some knowledge of kayaking.

INSTRUCTIONS: Answer questions 1 to 3 based on the article "Designing a Kayak." Complete sentences are not required.

1. The writer states that a 23- to 24-inch beam and an 18-foot length are "the numbers that work" for a "symmetrical cruising kayak." Explain why lower and higher dimensions are **not** efficient. **(4 marks)**

   Narrower than 23-inch beam: _____

   _____

   Wider than 24-inch beam: _____

   _____

   Shorter than 17-foot length: _____

   _____

   Longer than 20-foot length: _____

   _____

2. In the **layout** of the **glossary**, name and explain **two** techniques used to make the information easily accessible to the reader. **(4 marks)**

   Technique 1: _____

   Explanation: _____

   _____

   Technique 2: _____

   Explanation: _____

   _____

3. Identify **two** purposes of Figures 1 and 2 in this article. **(2 marks)**

   Purpose 1: _____

   _____

   Purpose 2: _____

   _____

OVER

PART C: EDITING

Value: 7 marks **Suggested Time: 7 minutes**

INSTRUCTIONS: You are the Program Director of Virtual University, an online distance learning school. You have prepared the following e-mail to send to an interested student. Before sending the message you will need to edit it for clarity and consistency. For questions 19 to 25, select the **best** answer and record your choice on the Response Form provided.

To: bgibson@powellandco.ca
From: dwright@virtualU.com
Subject: Online Resources
Cc: apederso@virtualU.com
Bcc:
X-Attachments:

1 Thank you for your interest in Virtual University's online resources, we are expecting to have the course materials for Business Administration 101 available by next semester.

2 Our web site co-ordinator is currently Mr. Alex Pederson. You should contact him to inquire about the date on which these materials will be available. His e-mail address is given above.

3 We have been piloting the Business Administration 101 materials to improve their quality and suitability for distance learning. We have also insured that all materials will run on both PC and Mac platforms. _____, we are developing similar web sites for Leadership 210 and Finance 220, as well as starting a new site for Bookkeeping 110.

4 Please get back to me if we can be of further help. Also, you might like to check out our web page again in about a month. I hope to have it updated by then.

19. In paragraph 1, the comma in the segment "online resources, we are expecting"

A. is correct.
B. should be a dash.
C. should be a colon.
D. should be a period.

20. Paragraph 2 could best be improved by

A. placing it at the end of paragraph 4.
B. rewriting it entirely in first person plural.
C. including the postal address as part of the paragraph.
D. combining the first and last sentence of the paragraph.

21. In paragraph 3, there is an error in the second sentence. Which of the following sentence fragments contains the error?

    A. We have also insured
    B. that all materials
    C. will run on
    D. both PC and Mac platforms.

22. Which of the following would be best inserted in the underlined space in paragraph 3?

    A. However
    B. In addition
    C. Alternatively
    D. Consequently

23. Which of the following is the best revision for the underlined part of the last sentence in paragraph 3?

    A. Leadership 210; Finance 220; Bookkeeping 110.
    B. Leadership 210, Finance 220, and Bookkeeping 110.
    C. Leadership 210, Finance 220, and recently, Bookkeeping 110.
    D. Leadership 210, as well as Finance 220 and Bookkeeping 110.

24. The writing style of the last paragraph could best be described as

    A. formal.
    B. informal.
    C. professional.
    D. instructional.

25. The **main** purpose of this message is to

    A. promote online resources.
    B. respond to a request for information.
    C. persuade the reader to take Leadership 210.
    D. describe the course materials currently available.

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Organization and Planning
(this will not be marked)

OVER

PART D: DESIGN

Value: 15 marks **Suggested Time: 20 minutes**

INSTRUCTIONS: Read the situation below and create an appropriate product (complete with title). You may wish to use visual representation to enhance the message.

- underline words to indicate *italics*
- (circle) words to indicate **bold**
- describe graphic — use a box to indicate the look and placement of a graphic

4. You are the Communications Officer for the Canadian Centre for the Prevention of Stroke and Heart Disease. You have been directed to create an 8.5" × 11" leaflet that will inform the public about strokes. **(15 marks)**

   You have collected the following information to create the leaflet:

   A stroke is really an attack on the brain caused by the blood supply to a part of the brain being blocked. Stroke is the number-one cause of adult disability and the number-four cause of death in Canada. Everyone, regardless of age or gender, is at risk of a stroke.

   There are three Rs to keep in mind concerning stroke prevention and survival:

   Reduce the risks that increase the likelihood of a stroke
   smoking; uncontrolled high blood pressure; not knowing if you have heart disease or a history of heart disease in your family; not knowing if you have diabetes or choosing not to treat diabetes that you have; eating a high-fat diet; not getting any or enough physical exercise.

   Recognize the signs that one might be experiencing a stroke
   a sudden change in vision; double vision, or loss of sight, particularly in one eye at a time; a face, an arm or a leg that suddenly becomes weak, numb and / or begins to tingle; being unable to speak or not being able to understand speech; sudden, extremely painful headaches; falling down unexpectedly or becoming totally dizzy.

   React quickly and efficiently
   If you suspect a stroke, be absolutely sure to treat it as a medical emergency. It is strongly advised not to wait for the symptoms to ease off or pass. You or someone you are with should call 911 for help immediately.

   The public may contact the centre at 1-800-555-4326.

FINISHED WORK

OVER

Organization and Planning
(this will not be marked)

PART E: CASE STUDY

Value: 35 marks (Content: 20 marks; Visual Design: 15 marks) **Suggested Time: 60 minutes**

INSTRUCTIONS: Read the scenario below and write a standard business memorandum. For ease of navigation, it is expected that you will include supporting visuals. For emphasis in your work

- underline words to indicate *italics*,
- (circle) words to indicate **bold**.

5. **Scenario:**

You are Robbie Camstone, President of the Drama Club for J.W. Preston Secondary School. As president of the club, you must seek the approval of your principal for this year's play, *Grease*. In addition, you also need to request an advance towards the up-front costs of producing this musical. While you know the principal is generally supportive of the drama club, she may be reluctant to provide the necessary funds since the club lost $673.45 on last year's production, and the school had to cover the costs. The Drama Club still owes this amount to the school, so any proposal that shows the club's ability to pay this debt is more likely to be accepted.

Your club members believe that part of the problem last year was the choice of the play, *Golden Acres*, which was somewhat dated and appealed mainly to an older audience. Unfortunately, in the small interior community of Pine River, BC, there simply wasn't enough interest in seeing the performance, despite the high calibre of the five actors and three crew members. In addition, the play dates ran up to Spring Break, a time when many families had already left for their holidays.

The musical *Grease* appeals to people of all ages. Since it requires a large cast (30) and crew (10) of both school and community members, this will automatically increase the number of people who will know about the play and want to attend. The dates for the production are February 14th to 20th, 2001. The advertising campaign will take advantage of everyone's desire to escape the winter blahs. Also, a dinner theatre is planned for February 14th. Given that options for Valentine's Day are very limited in the community, this should be a big attraction.

The play's director, Jason Wilson, and producer, Manjeet Fajaar, have given you the following conservative estimate of revenue and expenses. **Revenue:** 300 adult tickets ($7); 200 student/senior tickets ($5); advertising in the program (10 ads @ $25 each); 100 dinner theatre tickets ($15). **Expenses:** production/copyright fees ($650); costumes ($300); lights ($250); catering for dinner theatre ($8/plate); set ($850); advertising ($350); printing of programs, which will be designed by the Business Education class ($0.20/each, you'll need 100 more than estimated attendance); flowers ($150).

To support the Drama Club, the caterer, the florist and the Business Education class have agreed to defer payment until after the musical production.

Task:

Write a **persuasive** memorandum to the principal, Mrs. Lee, requesting approval of the play and an advance to cover the necessary pre-production costs. Date your document September 30, 2000.

You may detach this page for convenient reference.
Exercise care when tearing along perforations.

OVER

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Organization and Planning
(this will not be marked)

OVER

FINISHED WORK

FINISHED WORK

OVER

FINISHED WORK

FINISHED WORK

	1st	2nd	Subtotal
Content			
Visual Design			

END OF EXAMINATION

ACKNOWLEDGEMENTS

"Labour Force Survey." Graph. *Globe and Mail* 16 November 1998: B3.

Stuhaug, Dennis. "Designing a Kayak." *The 1999 Complete Guide To Kayak Touring* 1998: 22–26.

Feathercraft Folding Kayaks and Accessories. Illustrations. April 1997: 8, 12.