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Technical
and Professional
Communications 12

JANUARY 2002

Course Code = TPC

Student Instructions

1. Place 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.

Question 1:

1. .

(4)

Question 2:

2. .

(2)

Question 3:

3. .

(4)

Question 4:

4. .

(20)

Question 5:

5. .

(35)

**TECHNICAL
AND PROFESSIONAL
COMMUNICATIONS 12**

JANUARY 2002

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	20	20
PART E: Case Study	35	60
	Total:	
	90 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

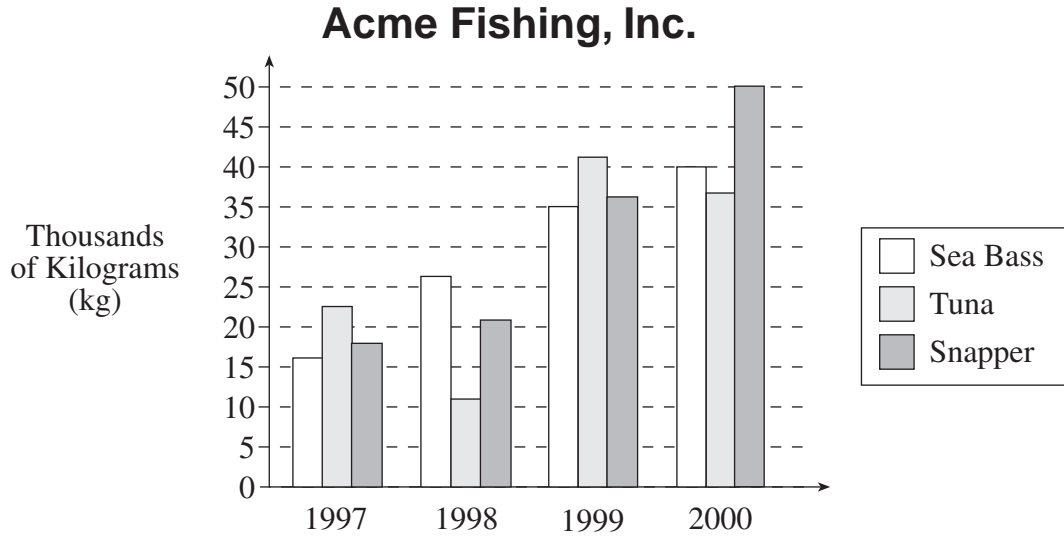
INSTRUCTIONS: For each multiple-choice question, select the **best** answer and record your choice on the Response Form provided. Using an HB pencil, completely fill in the circle that has the letter corresponding to your answer.

1. Which resource below would **best** help you to locate current information on how effective the *Young Offender's Act* has been in deterring crime?
 - A. *Social Sciences Index*
 - B. *Sociological Abstracts*
 - C. *Sociology Today* textbook
 - D. *Social Sciences Today* magazine

2. In a long, formal report, a table of contents
 - A. is always required.
 - B. requires complete sentences.
 - C. is a maximum of one page in length.
 - D. lists the sections in descending order of importance.

3. What would be the best organizational strategy for an incident report?
 - A. spatial
 - B. chronological
 - C. scientific method
 - D. order of importance

Use the following graph to answer questions 4 and 5.



4. How many kilograms of tuna did Acme Fishing catch in 1998?
- A. 1 100 kg
 - B. 2 200 kg
 - C. 11 000 kg
 - D. 22 000 kg
5. From the information shown, it can be concluded that
- A. tuna was scarce in 1997.
 - B. the demand for sea bass has risen steadily from 1997–2000.
 - C. Acme makes more money from snapper than sea bass or tuna.
 - D. Acme caught more than twice as much snapper in 2000 as in 1998.

Use the following advertisement to answer questions 6 and 7.

Dazzling White

The only bleaching gel and toothpaste in one!



94% of dentists surveyed would recommend Dazzling White to their patients. Dazzling White is the whitening toothpaste with safe, maximum strength, peroxide whitening power. It can safely whiten teeth up to 6 shades. This revolutionary, clinically proven, brush-in formula is recommended for at-home use. Easy to use. Simply brush your teeth and see the dazzling results!

6. According to the advertisement, Dazzling White
 - A. whitens without the use of peroxide.
 - B. has been recommended by 94% of all dentists.
 - C. should be used only under a dentist's supervision.
 - D. has been clinically tested and proven safe for consumers.

7. The product's appeal is primarily generated by the advertiser's
 - A. use of varying font sizes.
 - B. employment of celebrity figures.
 - C. use of effective sentence structure.
 - D. claims of professional endorsement.

OVER

8. Which of the following is an example of ethical behaviour?
- A. using another's words without acknowledgement
 - B. a supervisor signing a letter created by an assistant
 - C. providing a burned copy of Windows® to your teacher
 - D. submitting a Social Studies paper purchased from the Internet
9. Yahoo® and Altavista® are both types of
- A. modems.
 - B. PC hard drives.
 - C. search engines.
 - D. CD-ROM units.
10. To safeguard your computer against disruption from an unwanted source, you could
- A. install a cookie.
 - B. add more RAM.
 - C. upgrade Windows.
 - D. install anti-virus software.

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.

A River of Uncertainty

Scientists Debate Ways of Restoring Salmon Health to the Snake System

1 The big hydroelectric dam sits deep in a valley framed by softly rounded, grass-covered mountains that look from a distance as if they have been sanded down and then covered with beige and blond velvet.

2 Great expanses of sun-dappled blue water, more reservoir or lake than river, stretch above and below the concrete-and-earth barrier. That is part of the problem.

3 The once fast-flowing Snake River is now so slow, and Lower Granite Dam so much of an impediment, that salmon—totem fish of the Pacific Northwest and the focus of a landmark political, economic and environmental struggle—cannot migrate up and down the Snake without the help of an elaborate manmade Rube Goldberg-like system.

4 So it was on a recent day as a state fisheries biologist, Fred Mensik, plucked a silvery, 15-centimetre fish from water speeding through a trough.

5 “Chinook,” Mensik said, identifying it as a member of the heftiest of the salmon species. If it lives long enough, the juvenile smolt, as it is called, could grow to a metre and 20 kilograms or more.

6 Mensik measured the fish, entered the information into a laptop computer and returned the fish to the trough, where it joined other smolts and migrating young steelhead (sea-run rainbow trout) on their way to a tank truck parked outside.

7 The truck would transport the juvenile fish nearly 400 kilometres downriver, past seven other dams in the Columbia River system, of which the Snake is a part. There the fish would be released to resume a trip to the Pacific Ocean.

8 While Mensik and his co-workers were shepherding the fish downstream, adult salmon and steelhead—big, powerful veterans of years at sea—were climbing a fish ladder a few metres away, heading upstream to spawn and die.

9 But there are so few going back upstream that all these fish, along with all other salmon and steelhead that spawn in the Snake River, are listed as imperiled under the Endangered Species Act.

10 Will the elaborate, two-decade-old system for moving fish around the dams prove inadequate to save the salmon? The question is at the heart of a tense debate over whether to continue to rely on the transportation system or junk it and remove the earthen portions of Lower Granite and three other hydroelectric dams on the lower Snake.

11 Breaching the dams would help restore the natural flow along a 225-kilometre stretch of the river, and many scientists say it would be the single most effective remedy for the salmon’s plight. The concrete portions of the dams, their humming turbines silenced, would become relics—abandoned monuments to a time when the only consideration was to conquer and harness nature, and to the dawn of an era in which co-existing with nature has been made a priority.

12 A decision on the dams, driven by a federal lawsuit brought by environmentalists, was expected by early next year. If the presidential administration proposes breaching the dams, the issue would then go to Congress, which must appropriate the money.

13 Few if any conservation problems match this one for scale and complexity, or for its many connections with the modern economy. “The salmon involves our whole way of doing things,” said Dr. Peter Kareiva, an ecologist who is

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Exercise care when tearing along perforations.**

OVER

directing a scientific assessment of the problem for the National Marine Fisheries Service. "There is no simple, easily defined enemy."

14 Many scientists and environmentalists say the question of whether to breach the dams is a no-brainer. They argue that the population of the Snake River salmon began to decline after the dams were built in the 1960s and 1970s, and that while the system for trucking and barging fish downstream and helping adults back up may have helped, it is inadequate.

15 "Prior to completion of the lower Snake River dams, Snake River stocks did as well or better than their downriver counterparts," said Ed Bowles, a scientist who is the salmon and steelhead recovery manager for the state of Idaho, which contains the Snake's watershed upstream of the four dams. "Since completion of the dams, we have every year done much worse."

16 But other scientists, particularly those of the marine fisheries service, say the situation is more complicated. The service's studies, which are being reviewed by an independent panel, suggest that while breaching the dams may be necessary to save some salmon stocks, it will not be enough.

17 The wild salmon population has also been hurt by the destruction and degradation of spawning areas, overfishing, and the introduction of hatchery-bred salmon and trout, according to the analysis. (Only about 20 per cent of Snake River salmon today are the progeny of wild fish.)

18 Unless these problems are solved, the analysis suggested, the wild salmon and trout will probably continue to decline, even if the dams are breached.

19 Breaching "is not going to be a silver bullet," said Dr. Michelle McClure, a biologist with the fisheries service who is helping to conduct the federal analysis.

20 Moreover, said the fisheries service, which will draft the scientific opinion on which the decision about the dams will be based, the latest evidence suggests that trucking and barging young fish is more effective than was previously thought. Whether that is true should become clear in five or ten years, scientists with the fisheries service said.

21 One option, they said, would be to wait. But other experts, including Bowles, said the answer was as apparent now as it would ever be. The fisheries service said any deal would increase the likelihood that some stocks of Snake River salmon would become extinct.

22 Pacific salmon are different from Atlantic salmon in that there are several species, and that different populations spawn at different times. Moreover, they spawn only once and then die (Atlantic salmon, and steelhead, can return to the ocean and spawn again, several times).

23 Conservation efforts have focused not so much on entire species of Pacific salmon as on specific stocks, a group of fish that spawn in the same locality, like a specific creek.

24 Individual stocks are important because each diverges genetically from other stocks as they reproduce. Such divergence is the touchstone of evolutionary adaptation, and so individual stocks are protected by the Endangered Species Act.

25 For many stocks of Snake River salmon, the marine fisheries service has found that the risk of extinction is considerable, sometimes even in the short term.

26 For instance, surveys of a chinook stock that spawns in Marsh Creek, a beautiful alpine meadow stream in the Frank Church Wilderness of Idaho, found no spawners last spring or in the spring of 1995.

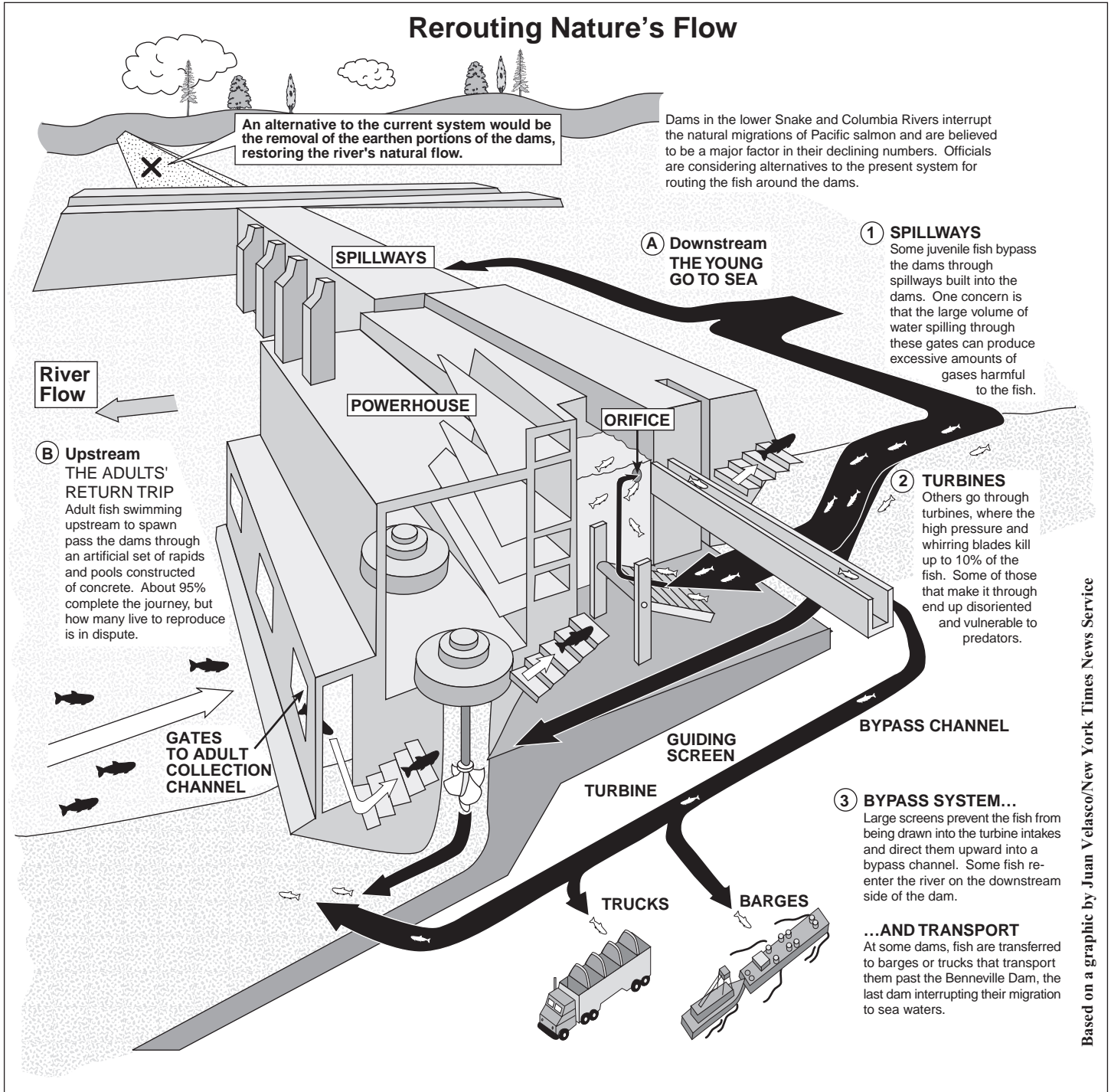
27 The studies by the fisheries service indicated that the Marsh Creek salmon had at least a one-in-ten chance of virtual extinction (only one spawner a year) in the next decade, and that many stocks of chinook that spawned in the spring and summer had a one-in-two chance of extinction in the next century.

28 The risk that all Snake River runs of spring and summer chinook will be extinct in 100 years was calculated at about 50 per cent.

29 The Columbia-Snake system was once one of the most fecund salmon producers in the world, with the Snake drainage giving birth to about half of all salmon in the system. But the dams, overfishing, destruction of spawning areas and the competition with hatchery fish have cut severely into their numbers.

by William K. Stevens

Rerouting Nature's Flow



Based on a graphic by Juan Velasco/New York Times News Service

SOURCE: UNITED STATES ARMY CORPS OF ENGINEERS

11. A “smolt” is the term for a
- A. hefty salmon.
 - B. young chinook.
 - C. migrating chinook.
 - D. sea-run rainbow trout.
12. The question asked by the author in paragraph 10 is
- A. answered later in the article.
 - B. ignored by the hydroelectric company.
 - C. given a definite answer by the scientists.
 - D. still to be answered at the end of the article.
13. In paragraph 11, “breaching” means
- A. restoring.
 - B. bypassing.
 - C. breaking through.
 - D. purposely neglecting.
14. The author of the article views operational dams as a sign of people’s desire to
- A. harness nature.
 - B. protect the salmon.
 - C. co-exist with nature.
 - D. eliminate farm salmon.
15. The question of whether or not to keep using the dams arose because
- A. the modern economy demanded efficiency.
 - B. environmentalists pushed for a federal lawsuit.
 - C. the U.S. president proposed eliminating the dams.
 - D. the transportation system for fish was no longer available.
16. In paragraph 13, Dr. Peter Kareiva suggests that we must consider the needs
- A. of all the branches of the economy.
 - B. predominantly of environmentalists.
 - C. mainly of the hydroelectric company.
 - D. primarily of the National Marine Fisheries.

17. In paragraph 14, the term “no-brainer” can best be described as

- A. a pun.
- B. jargon.
- C. plain language.
- D. colloquial language.

18. The tone of the article is predominantly

- A. objective.
- B. optimistic.
- C. censorious.
- D. condescending.

INSTRUCTIONS: Answer questions 1 to 3 based on the article “A River of Uncertainty.” Complete sentences are not required.

1. Scientists disagree on the causes of the decline in the population of the Snake River wild salmon. Identify **two** different causes reported in the article, and state **one** piece of evidence that scientists have cited for each cause. **(4 marks)**

Cause 1: _____

Evidence: _____

Cause 2: _____

Evidence: _____

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2. Identify **two** ways in which Pacific salmon differ from Atlantic salmon.

(2 marks)

Pacific Salmon vs. Atlantic Salmon	

3. Name **two** devices used in the layout of the diagram that help make the information clear, and explain how each device enhances understanding.

(4 marks)

Device	Explanation
Example: fish graphic	<ul style="list-style-type: none">• shows the paths taken by the salmon

PART C: EDITING

Value: 7 marks

Suggested Time: 7 minutes

INSTRUCTIONS: You are the health and wellness representative of Trident Systems. You have prepared the following e-mail to send to staff. Before sending the message, edit for clarity and consistency. For questions 19 to 25, select the **best** answer and record your choice on the Response Form provided.

To: staff@tridentsystems.com
From: support@tridentsystems.com
Subject: Preventing Repetitive Stress Injury (RSI)
Cc: management@tridentsystems.com
Bcc:
X-Attachments:

- 1 RSI is a condition that results from working on computers for extended periods of time. The injuries include chronic eye strain, wrist, neck, and back pain. In almost all cases, these injuries could have been prevented by the appropriate adjustment of office furniture and the correct layout of computer components.
- 2 We have received notification from human resources that employee absenteeism due to RSIs has increased by 15% in the last six months. _____, management has directed the support staff to research and distribute information to all staff outlining the nature of this condition and how it can be prevented.
- 3 Good posture goes a long way to preventing RSI. Ensure that your keyboard tray is adjusted to allow for a 90 degree angle in your elbows while typing on your keyboard. In addition, adjust your desk chair so that your forearms and thighs are parallel to the floor you can use your seat adjustments for this purpose.
- 4 To minimize eye strain, your monitor must be positioned a minimum of twenty four inches from your eyes. Check the refresh rate of your monitor. Management has agreed to replace all monitors that have a refresh rate of less than 68 hertz, as these types are known to be a significant cause of chronic eye strain.
- 5 We hope these tips help reduce the occurrence of RSI at Trident Systems Inc. Remember, without your data input, there can be no corporate output!

19. The underlined sentence in paragraph 1 uses

- A. active voice.
- B. parallel structure.
- C. dangling modifiers.
- D. figurative language.

20. Which of the following should be inserted in the underlined space in paragraph 2?

- A. In addition
- B. To this end
- C. Surprisingly
- D. Consequently

21. The e-mail could best be improved if paragraph 2 were
- A. deleted as redundant.
 - B. appended to paragraph 1.
 - C. exchanged with paragraph 1.
 - D. divided into two separate paragraphs.
22. Choose the correct revision for the underlined part of the last sentence in paragraph 3.
- A. are parallel to the floor; you can use your seat adjustments for this purpose.
 - B. are parallel to the floor, you can use your seat adjustments for this purpose.
 - C. are parallel to the floor; and you can use your seat adjustments for this purpose.
 - D. are parallel to the floor: and you can use your seat adjustments for this purpose.
23. Which of the following sentence fragments from paragraph 4 contains an error?
- A. To minimize eye strain,
 - B. your monitor must be positioned
 - C. a minimum of twenty four inches
 - D. from your eyes.
24. The tone of paragraph 5 is
- A. critical.
 - B. indifferent.
 - C. aggressive.
 - D. motivational.
25. Which of the following phrases is **not** a purpose of the e-mail message?
- A. to improve corporate profit
 - B. to reduce the incidence of RSI
 - C. to acknowledge the severity of RSI
 - D. to describe the perfect working environment

Organization and Planning
(this will not be marked)


	1st	2nd	Total
Design			

PART D: DESIGN

Value: 20 marks

Suggested Time: 20 minutes

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

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

4. You are the instructor of a First Aid course being offered through the Canadian Red Cross Society. Your supervisor has informed you that she needs you to teach an introductory lesson to her class this afternoon. She was planning on creating a visually appealing handout of the information, but has been called away on other business.

Using the information provided below, create the class handout informing those attending the class of what they can do to provide assistance in case of an emergency.

You can always do something to help in any emergency. You should ensure the safety of the casualty, yourself, and bystanders. You must be alert to possible dangers at the scene. Telephone your local emergency number. Reassure the casualty and others at the scene of the emergency that everything will be okay. Gather as much information from the casualty, family, friends and bystanders as possible. When they arrive, provide this information to Emergency Medical Services (EMS) personnel. Another thing you can do is to organize bystanders to call the local emergency number or to meet and direct the ambulance and other vehicles to the scene of the accident. You can also use bystanders to obtain First Aid supplies and keep the area free from unnecessary traffic.

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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 Pat Minar, a graduating student from BC Secondary School. Like many of your friends, you have a definite idea of what you want to do with your life after graduation. As a TPC 12 student, you have developed a real interest in and flair for technical communications, so much so that you have decided to get your Bachelor of Arts (B.A.) in English with a focus on Technical Writing and Communications. In the end, you hope to find employment as a communications consultant in the business and technology sectors.

Your main problem has been in deciding which university to attend for your post-secondary education. Since September 2001, you have been researching a number of institutions that offer your program. However, you are having difficulty making the final decision from the three universities on your short-list: Mountain University, Central University, and Prairie University. You have been examining these three institutions with regards to tuition costs, class sizes, professors' qualifications, library resources, and the rate of students who started a program and successfully graduated from the university in their chosen program. Your grades will meet or exceed the minimum entrance requirements for each of these universities.

Mountain University is fairly expensive, at a cost of \$5 952 per year. Many of the classes at Mountain (37%) have fewer than 26 students in them. On average, there are 280 library resources available for each student enrolled at the university. The professors are well trained, with 98% of them having received their Doctorate (PhD). Most people who start at Mountain end up graduating with their degree (93%).

On the other hand, only 80% of students end up graduating from Central University, and only 86% of the professors have their PhD. The classes are a bit larger at Central (only 34% of Central's classes have less than 26 students in them). However, at a cost of only \$3 600 per year and with 400 library resources available for each enrolled student, it might be worth taking a look at Central a bit more closely.

Prairie University is a bit more expensive than Central, at \$4 318 a year for tuition. The classes are even larger than Central's, with 75% of the classes being over 25 students in size. With 90% of its professors having their PhD and a library stocked to hold 300 resources per student, Prairie has the highest graduation rate (95%).

You need to make sense of all these statistics and decide which factors should be weighed more heavily in your decision-making process. Time is running out and you should make your decision by March 15, 2002, in case you receive an offer of early acceptance. Each of the universities has a very good reputation with your chosen degree program. The big issue for you is that you access the best education for the best price. You decide to write to Mr. Tong, BC Secondary's most experienced counsellor, and seek his advice with respect to which university you should attend.

Task:

Write a standard business memorandum to Mr. Tong. Present your research findings and request his recommendation. Date your correspondence February 15, 2002.

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ACKNOWLEDGEMENTS

Adapted from “A River of Uncertainty” by William K. Stevens. *Times-Colonist*
14 November 1999: A8.

Adapted from *First Aid—The Vital Link*. Missouri: Mosby-Year Book Inc., 1994.