CFE CANDIDATE NUMBER: [ ] [ ] [ ] [ ] [ ] [ ]

Common Final Examination
September 13, 2019 – Day 3
(Booklet #1 – Cases)

Total examination time: 4 hours.
Further details on the examination can be found on the next page.

GENERAL INSTRUCTIONS BEFORE THE EXAMINATION
1. Fill in your 7-digit candidate number on the booklets. The exam booklets (or paper response, as instructed) must be submitted before leaving the writing centre. They must NOT BE REMOVED from the writing centre. If these items are not received, the response may not be accepted.
2. Follow the SecureClient instructions provided. Instructions must not be removed from the writing centre.
3. Acknowledge the Policy Statement and Agreement Regarding Exam Confidentiality in SecureClient (as shown below).

Policy Statement and Agreement Regarding Exam Confidentiality
I understand that all examination materials are the property of CPA Canada and are under the exclusive custody and control of CPA Canada. CPA Canada has the exclusive authority over examination materials to determine the contents, use, retention, disposition and disclosure of this material. Candidates do not have access to the examination questions, examination marking keys or any other marking materials for a non-disclosed examination. For disclosed examination questions, access to questions, marking keys and other marking materials is only available when published by CPA Canada.

I hereby agree that I will not:
• Obtain or use answers or information from, or give answers or information to, another candidate or person during the sitting of the examination;
• Refer to unauthorized material or use unauthorized equipment during testing; or
• Remove or attempt to remove any CPA Canada Examination materials, notes or any other items from the examination room.

I further agree to report to CPA Canada any situations where there is a material risk of compromising the integrity of the examination.

I affirm that I have had the opportunity to read the CPA Examination Regulations and I agree to all of its terms and conditions.

In addition, I understand that failure to comply with this Policy Statement and Agreement will result in the invalidation of my results, and may result in my disqualification from future examinations, expulsion from the profession and possible legal action.

______________________________
CANDIDATE NAME (Please print)                             SIGNATURE
Examination Details

The examination consists of:

Booklet #1 – (this booklet)
  Case #1 (90 minutes)
  Case #2 (75 minutes)
  Case #3 (75 minutes)
Booklet #2 – Rough notes

Times noted above are guidelines. Candidates are responsible for managing the time allocation.

The cases should be answered in SecureClient. Each case has a word processor and a spreadsheet for inputting your response. Make sure that you answer each case in the right section of SecureClient. The main body of your response should be in the word processor. Only supporting calculations should appear in the spreadsheet file, in Sheet 1. You are responsible for clearly explaining all your calculations.

Answers or part answers will not be evaluated if they are recorded on anything other than SecureClient or the CPA Canada writing paper provided.

The CPA Canada Handbooks and the Income Tax Act are available within SecureClient throughout the entire examination. SecureClient provides the standards in effect and tax laws substantively enacted as at December 31, 2018.

A tax shield formula and other relevant tax information are available at the end of this booklet.

Rough-note paper is available in a separate booklet. Rough notes, and any other notations made in the exam booklet(s), will not be evaluated.
**Case #1**

(Suggested time: 90 minutes)

StillGood Food (SGF) is a newly-formed, not-for-profit organization with a mission of reducing food waste. Despite food safety standards indicating they can still be safely consumed, many companies discard food with minor blemishes and items approaching “best before” dates. SGF will collect this discarded food and sell it at reduced prices. SGF operations will begin on February 1, 2019, with the opening of one store (Appendix I). To support their own environmental sustainability goals, several grocery stores have agreed to donate discarded food.

It is January 3, 2019, and you, CPA, have been engaged by Jakob Janssen, SGF’s founder and executive director, as an advisor. To allow for contingencies, Jakob is targeting an excess of $10,000 of revenues over expenses for the first year. Jakob has identified two sales pricing options SGF could follow. He asks you to analyze them and recommend one (Appendix II).

Jakob received an unsolicited proposal from RSS, a high-end clothing retailer. SGF would buy excess clothing from RSS at reduced prices and sell it in its store (Appendix III). He asks you to determine the amount of outside financing required to cover the monthly cash requirement of the first six months of the RSS initiative. He would also like you to discuss the strategic fit and other decision factors that should be considered.

Because the store lacks an office area, Jakob will do administrative work from his home office. He asks you to explain the taxation rules and to advise on the deductibility of the expenses on his personal tax return (Appendix IV).

Six individuals want to contribute to SGF immediately to fund the opening of more stores and further minimize food waste. Jakob is not prepared to open more stores until the first one is operating successfully. Since the contributors specified that the funds, and income earned on the funds, will be used solely to open new stores, the money will be invested until then, likely for 24 to 36 months. Jakob asks which investment option would be best suited for the funds (Appendix V).

Eldred Bank loaned SGF the start-up funds for the food operations. Eldred requires SGF to provide audited financial statements for its first year of operations, with an unmodified audit opinion. SGF has chosen to apply accounting standards for not-for-profit organizations (ASNPO) and Jakob would like you to explain the accounting treatment for the different contributions received by SGF. Because SGF will lease its refrigerators, Jakob would also like you to explain the accounting treatment for the lease.

Jakob would like you to advise him of any issues with the proposed processes that could jeopardize an unmodified audit opinion, and to suggest improvements. He asks you to discuss how each stakeholder might react if an unmodified opinion is still not possible.
APPENDIX I
SGF OPERATIONS

Most grocery stores will donate whatever food they can, when they can. Several of the donors have stated that they would not do the same for a for-profit business.

Volunteers will perform most of the activities. They will pick up the food and deliver it to SGF’s store, where other volunteers will sort it immediately. SGF is not intending to maintain records detailing the nature and quantity of food being collected.

Any food not suitable for sale will go into a compost bin, which will be picked up weekly. Minimizing landfill is important to Jakob, who has told stakeholders that SGF will be environmentally sustainable.

SGF will operate its store with basic displays. Items will clearly note the “best before” dates and recommend early consumption. Sales will be cash only, with hand-written receipts provided upon request. At the end of each day, Jakob will deposit the cash collected in the bank.
APPENDIX I (continued)
SGF OPERATIONS

Projected Statement of Operations for the First 12 Months

<table>
<thead>
<tr>
<th>Sales</th>
<th>Note</th>
<th>$ 509,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>1</td>
<td>126,000</td>
</tr>
<tr>
<td>Salaries</td>
<td>2</td>
<td>151,000</td>
</tr>
<tr>
<td>Trucks</td>
<td>3</td>
<td>35,000</td>
</tr>
<tr>
<td>Interest</td>
<td>4</td>
<td>10,000</td>
</tr>
<tr>
<td>Depreciation</td>
<td></td>
<td>62,500</td>
</tr>
<tr>
<td>Utilities, advertising and other</td>
<td></td>
<td>67,000</td>
</tr>
<tr>
<td>Compostable waste removal</td>
<td></td>
<td>8,000</td>
</tr>
<tr>
<td>Refrigerators lease</td>
<td>5</td>
<td>40,000</td>
</tr>
<tr>
<td>Excess of revenues over expenses</td>
<td></td>
<td>$ 10,000</td>
</tr>
</tbody>
</table>

Notes:

1. The landlord has agreed to charge $10,500 per month because SGF’s mission is to reduce food waste. If at any time the landlord believes that mission has changed, rent will increase to the market rate of $15,000 per month.

2. SGF will have four full-time employees who will each be paid $37,500 per year to operate the store. Jakob will take a token salary of $1,000 per year as an employee to manage the store.

3. The $35,000 is for insurance, repairs, gas, oil and other truck-related expenses for the trucks that SGF plans to purchase.

4. SGF will borrow $125,000 from Eldred Bank at 8% interest to buy two used trucks and used fixtures.

5. SGF will lease its refrigerators, which have a market value of $170,000, a useful life of six years and unguaranteed residual value of $50,000 at the end of their useful lives. They will be leased for four years with annual payments of $40,000, payable at the beginning of each year. There is no purchase option in the lease contract. The lease payments include maintenance, which would cost $5,000 annually if purchased separately.
APPENDIX II
SALES PRICING OPTIONS

Knowing that the sales price affects the volume of sales, Jakob has identified two pricing options.

Option 1: Lower

On average, goods would be sold for 50% of wholesale prices. The forecasted sales figure of $509,500 is based on this "lower" price assumption.

Option 2: Higher

On average, goods would be sold for 75% of wholesale prices. Jakob expects the following variances from the "lower" price option:

- Sales volume would decrease by 25%.
- Utilities would decrease by $1,000 per month due to reduced use of the refrigerators.
- Because of higher selling prices, SGF would allow returns of non-perishables, which would cost $25,000 per year.
- Advertising would be increased by $24,000 per year.
- Due to increased wastage, compostable waste removal costs would double.
APPENDIX III
RSS PROPOSAL

RSS is offering to sell its unsold high-end clothing to SGF at the end of each season for 15% of retail prices, which RSS estimates would cost SGF a total of $120,000 annually. All sales would be final, with payment due 15 days from delivery. RSS estimates that SGF can resell the clothing for 30% of retail prices, that purchases would be made once every quarter, and that sales would be spread over the three months after delivery, with an estimated 5% never being sold.

Protecting these items from theft will require either hiring a security guard for $2,500 per month or installing a security tag system that would cost $20,000 upfront and would last for three years. Otherwise, shoplifting losses would average 25% of the selling price of the clothes in the store. The clothing would also require special racks that would cost $1,600 upfront and would last for two years, and SGF’s insurance would increase by $200 per month.
APPENDIX IV
HOME OFFICE EXPENSES

1. Jakob will work 40 hours per week for SGF, of which about 25 hours will be from home. The rest of the time, he will be meeting with suppliers and donors at their premises or at the store. He will also continue to use his office for personal matters.

2. The office square footage comprises 10% of Jakob’s home.

3. Jakob’s annual home costs are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>$1,800</td>
</tr>
<tr>
<td>Property taxes</td>
<td>$4,000</td>
</tr>
<tr>
<td>Home insurance</td>
<td>$ 800</td>
</tr>
<tr>
<td>Mortgage interest</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

4. If his home is used for business purposes, Jakob’s insurance company will charge an additional $500 per year.

5. Jakob’s home phone costs $60 per month and his internet costs $45 per month. He will use the home phone 50% of the time for SGF, for local calls only, and the internet 20% of the time.

6. Jakob paid $500,000 for his house. He estimates $300,000 was for the building and $200,000 for the land. He would like to claim capital cost allowance for the home office component.

7. Jakob will be spending about $10,000 on minor electrical work and painting for his home in the upcoming year, and estimates that $900 of that will be spent on the home office.
APPENDIX V
INVESTMENT OPTIONS

1. A three-year term deposit with the bank that would provide a variable rate of return of prime minus 1.5% annually. Funds cannot be withdrawn before maturity.

2. An “investors’ account” at the bank that would return 1% annually. Funds can be added or withdrawn at any time.

3. An equity mutual fund that has returned 10% per year for the last two years.

4. A municipal bond denominated in U.S. dollars, maturing in two years, with a 6% overall return.
Case #2

Veza Eye Centre Limited (VEC) provides eye examinations and sells prescription eyewear and high-end sunglasses.

It is early 2019, and Dr. Michelle Veza, optometrist and VEC founder, is reviewing the financial results for VEC’s first year, which ended December 31, 2018. She is surprised to see only a small profit and comes to you, CPA, looking for advice.

Wanting to better understand her business, Michelle has prepared a product line analysis (Appendix I). Because she is not sure she has done it right, she asks you to review her cost allocations and make all required revisions.

She is also thinking of eliminating the sunglasses line of business. She asks you to determine whether there is support for eliminating it, and the impact it would have on VEC’s profitability.

Michelle realizes that she lacks the skill set and time to perform a detailed financial review. She has heard of business owners focusing on only a few key statistics, called “key performance indicators” (KPIs). Michelle asks you how KPIs could be useful to her and which KPIs you would recommend and why.

Because prescription eyewear sales increase with the number of patients, Michelle is considering partnering with a second optometrist. She would like your thoughts on the strategic advantages and disadvantages of such an arrangement, given the person she has in mind (Appendix II).

In addition, Michelle gathered information for VEC’s and her own tax returns and has some questions (Appendix III).

Finally, Michelle has been approached by ABC Cloud (ABC) with a proposal to store VEC’s data (Appendix IV). Michelle asks you to discuss the risks of using its services and the controls and other procedures that ABC should have in place to address those risks.
APPENDIX I
PRODUCT LINE ANALYSIS

For the year ended December 31, 2018

<table>
<thead>
<tr>
<th>Note</th>
<th>Revenue</th>
<th>Total</th>
<th>Cost Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$1,000,000</td>
<td>Eye Exams</td>
</tr>
<tr>
<td>1</td>
<td>Salaries</td>
<td>160,000</td>
<td>80,000</td>
</tr>
<tr>
<td>2</td>
<td>Cost of sales</td>
<td>330,000</td>
<td>165,000</td>
</tr>
<tr>
<td>3</td>
<td>Rent</td>
<td>220,000</td>
<td>110,000</td>
</tr>
<tr>
<td>4</td>
<td>Utilities</td>
<td>44,000</td>
<td>22,000</td>
</tr>
<tr>
<td>5</td>
<td>Depreciation</td>
<td>55,000</td>
<td>27,500</td>
</tr>
<tr>
<td>6</td>
<td>Insurance</td>
<td>62,000</td>
<td>31,000</td>
</tr>
<tr>
<td>7</td>
<td>Office and other</td>
<td>66,000</td>
<td>33,000</td>
</tr>
<tr>
<td>8</td>
<td>Advertising</td>
<td>30,000</td>
<td>15,000</td>
</tr>
<tr>
<td></td>
<td>Total expenses</td>
<td>$967,000</td>
<td>$483,500</td>
</tr>
<tr>
<td></td>
<td>Profit</td>
<td>33,000</td>
<td>16,500</td>
</tr>
</tbody>
</table>

Michelle allocates all expenses based on gross revenues.

Notes:

1. VEC has three employees: Michelle; Abby, who helps with sales; and receptionist Kevin. They spend their time as follows:

<table>
<thead>
<tr>
<th>Employee</th>
<th>Salary</th>
<th>Managerial Duties</th>
<th>Eye Exams</th>
<th>Prescription Eyewear</th>
<th>Sunglasses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle</td>
<td>$80,000</td>
<td>40%</td>
<td>60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abby</td>
<td>$50,000</td>
<td>10%</td>
<td>80%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Kevin</td>
<td>$30,000</td>
<td>60%</td>
<td>30%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

2. The cost of sales represents the amount paid for supplies, prescription eyewear and sunglasses sold in the year. Of this amount, 10% relates to eye exams, 65% to prescription eyewear and 25% to sunglasses.
APPENDIX I (continued)
PRODUCT LINE ANALYSIS

3. VEC has a four-year lease contract, during which time the space rented cannot be reduced. Of the 1,200 square-foot space, 700 relates to eye exams, 300 to prescription eyewear, 100 to sunglasses, and 100 to a reception area.

4. Utilities mainly include electricity, which is largely a function of square footage.

5. 90% of depreciation relates to eye exam equipment and 10% to furniture and fixtures.

6. $40,000 is for professional liability insurance and $22,000 is for general premise insurance.

7. Office and other includes expenses such as postage, internet, cleaning and minor repairs.

8. Advertising includes local print advertisements, VEC’s webpage and related internet advertisements that focus on the eye examinations but also mention prescription eyewear and sunglasses sales.
APPENDIX II
SECOND OPTOMETRIST

Tom Trabek has been identified as a potential partner. Tom is 28 years old, became an optometrist two years ago and has been working as an employee for another optometrist since then. He is ambitious and loves the “business side” of medicine. Tom’s goal is to become managing director of an optometry practice with a dozen optometrists within the next five to 10 years. His preference is to buy into an existing practice rather than be an employee, and to increase his share quickly over time while focusing on growth.

Tom’s wife just had their first child and plans to stay home with their daughter for now, so the family will be counting on Tom to earn a competitive salary. Tom and his wife have no savings with which to buy into the practice.

Michelle is 47 and married with two daughters, aged 17 and 21, who are students. Her family is wealthy, which allows her to take a below-market salary. Her goal is to expand her business slowly, without incurring additional debt. Michelle hopes to work for the next 10 to 15 years, and then sell her practice and retire. She is relying on realizing a significant profit when she sells the practice.

The addition of an optometrist would require purchasing a second set of examination equipment. As Tom is technologically well-informed, he would expect the most up-to-date equipment, which could be expensive.
APPENDIX III

TAXATION QUESTIONS

Michelle would like your advice on the following questions:

1. To start VEC, Michelle borrowed $400,000 as a second mortgage on her family’s home. These funds went into an existing joint personal savings account that is shared with her husband. That account was used to invest in VEC’s shares, pay for their daughters’ school expenses and do some home renovations. Michelle asks whether the interest on the mortgage is deductible on her personal tax return.

2. In January 2018, to teach their daughters about investing, Michelle and her husband gave each of them the full amount needed for their future tuition and living expenses and told them to invest it in publicly-traded securities. The daughters earned interest income and dividends, and realized capital gains. Michelle wants to know how this impacts the family members’ 2018 personal tax returns.

3. Michelle belongs to a local association where optometrists can meet, attend lectures given by medical researchers and suppliers, and dine. VEC pays for Michelle’s annual membership. Michelle asks whether the association fees are deductible by VEC, and whether she will have a taxable benefit.

4. Michelle has a cell phone that she uses 90% for personal use and 10% for business because there is poor reception and unreliable WiFi at work. She asks whether some or all of the costs are deductible, either by Michelle or by VEC.

5. When Michelle first opened VEC, she paid an interior designer $1,000 for advice on colours, placement of office furniture and use of space. She wonders if this cost can be deducted or, because she believes it provides a benefit beyond one year, whether it must be treated as a capital expenditure.
APPENDIX IV
INFORMATION ON ABC

VEC’s patients’ medical information would be stored in the cloud by ABC. The information would be accessible through a browser from anywhere there is an internet connection. The files could be downloaded at any time and printed.

ABC incorporated last year and has since grown in popularity. It now stores data for hundreds of companies, mainly in the financial industry. Due to its quick growth, ABC has outsourced some of its data storage to a third party located next to ABC’s only location. The intention is to eventually increase the storage capacity at ABC and eliminate the outsourcing arrangement.

To keep up with the higher volume, ABC has recently hired new employees with varying levels of experience in cloud computing. In order to provide timely service, all employees have access to every client’s data.

ABC performs regular maintenance of its server. This is done by shutting it down for a few hours when needed.
Case #3

Christopher Zane and his brother Shawn were born in Nova Scotia, where they became highly respected carpenters. Although both can be stubborn, they have a good working relationship. In 2009, Christopher moved to British Columbia and started Luxury Homes Co. (Luxury), which builds luxury homes.

In June 2018, Shawn moved to British Columbia to work for Luxury and to start a new company, TinyCo, with his brother in the tiny-house industry (Appendix I). As one of a small number of carpenters worldwide who specialize in high-quality, tiny-house construction, Shawn will provide TinyCo with his carpentry skills. While continuing to operate Luxury, Christopher will provide TinyCo with his business expertise.

You, CPA, work for Birks & Oogle LLP, a public accounting firm. It is February 1, 2019, and the brothers have come to you for advice.

Christopher begins: “We need to choose between two business models: either TinyCo designs and builds 100% of the house, or buyers participate in the building process. We have information about demand for, and estimated costs of, each business model at different selling prices (Appendix II). Please help us determine the best model given the demand for each selling price, and the selling price we should set for the chosen model.

“To start building this summer, we will need $600,000 for start-up costs by the end of this spring. What are your views on the advantages and disadvantages of each funding source we have identified (Appendix III)?

“If we choose the grant, how would we account for the funds received and potential repayments under ASPE? In addition, what procedures would be performed for the level of assurance specified in the agreement?

“If we choose the grant, we will need to submit an assessment of TinyCo’s strengths, weaknesses, opportunities and threats as part of the grant application. Can you please provide us with this analysis?”

Shawn adds: “Friends said I can deduct all my moving expenses on my personal income tax return (Appendix IV). The $5,000 relocation allowance Luxury gave me helped cover some of these costs. Are my expenses deductible and is there anything else I should know regarding the eligibility of the move?”
APPENDIX I
INDUSTRY INFORMATION

Since its inception in North America about five years ago, the tiny-house movement has grown exponentially. Started by individuals who value affordable, sustainable housing, tiny houses are designed to make the most use of a limited space.

The North American tiny-house industry has grown from 10 companies three years ago to over 150 companies one year ago. Several Canadian construction companies have recently entered the market. A large amount of start-up capital is required. Lacking expertise in tiny-house construction, many sell poorly built houses and tend to undercut prices. Some of the smaller companies use lower-quality materials to increase their profit margins. As tiny-house customers value innovative, high-quality construction, these trends have hurt the industry’s sales and reputation.
APPENDIX II
DEMAND AND ESTIMATED COSTS

Demand

Construction of a tiny house requires several commodities, such as wood and steel, whose prices fluctuate. Market research shows a wide range in prices for tiny houses of similar quality. The projected annual demand for TinyCo is as follows.

Business model #1 – without buyer participation

<table>
<thead>
<tr>
<th>Price per Tiny House (in Canadian dollars)</th>
<th>Projected Annual Demand for TinyCo Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100,000</td>
<td>6</td>
</tr>
<tr>
<td>$ 75,000</td>
<td>11</td>
</tr>
<tr>
<td>$ 50,000</td>
<td>16</td>
</tr>
</tbody>
</table>

Business model #2 – with buyer participation

<table>
<thead>
<tr>
<th>Price per Tiny House (in Canadian dollars)</th>
<th>Projected Annual Demand for TinyCo Houses</th>
</tr>
</thead>
<tbody>
<tr>
<td>$97,000</td>
<td>8</td>
</tr>
<tr>
<td>$72,000</td>
<td>13</td>
</tr>
<tr>
<td>$47,000</td>
<td>18</td>
</tr>
</tbody>
</table>

The estimated number of customers in North America is 10,000 annually, of which 25% are in Canada.

The typical buyer:
- is 20 to 30 years old
- has an annual family income of $50,000 or less
- is seeking affordable housing
- wants the builder to provide World Tiny House Organization (WTHO) certification as evidence of meeting environmental and sustainability standards
- is likely to donate $20 to crowdfunding campaigns to encourage sustainability
APPENDIX II (continued)

DEMAND AND ESTIMATED COSTS

Estimated costs

Under both business models, TinyCo designs a customized floor plan for each house at an estimated cost of $7,000 per house, and builds the house on a trailer base that costs $25,000.

Construction of a tiny house costs $10,000 in labour. If the buyer helps with construction, TinyCo can save $8,000 in construction labour costs but could spend $5,000 more in other labour costs, for training and supervision of the buyer.

TinyCo’s costs for materials are estimated at $15,000 per house without buyers’ participation. With buyers’ participation, TinyCo’s costs will increase by $4,000 because buyers make mistakes that require more materials.

Fixed overhead is estimated to be $100,000 annually for up to 16 houses, and $160,000 if more than 16 houses are built in a year.

All TinyCo houses will be WTHO-certified, which costs $2,000 per house.
APPENDIX III
FUNDING SOURCES

Options

- We might have enough personal savings by this spring to fund the start-up costs, but that would exhaust our savings. If we have not saved enough by then, we can use money from our RRSPs.
- Cash Mart would loan us $600,000, repayable monthly over two years at an annual interest rate of 18%. The first payment would be due within 30 days of the loan being granted. If any scheduled payment is missed, the balance of the loan would become due immediately.
- An angel investor would contribute $600,000 in exchange for a 60% ownership of TinyCo. The investor has extensive business experience and is well known in the Information Technology community.
- We can start a crowdfunding campaign.
- We can apply for a four-year grant (see below).

Grant agreement

To help expand the tiny-house movement throughout Canada, the Canadian Tiny House Association provides funding. Eligible companies will receive $550,000 on April 1, 2019. The full amount is forgivable, conditional upon the company providing an audit report confirming it complies with the grant requirements.

The $550,000 must be allocated as follows: $350,000 for operating expenses, with at least $60,000 to be spent in each of the four years of the grant; and $200,000 for capital expenditures. Any amounts not appropriately spent at the end of the four years must be repaid.

The grant requirements are as follows:
- TinyCo must not compensate each shareholder more than $75,000 annually.
- TinyCo must produce and sell a minimum of 10 tiny houses annually.
- Each tiny house must:
  - not exceed 400 square feet
  - not be sold for more than $100,000
  - be WTHO-certified

If the requirements are not met, the full amount must be repaid by March 31, 2023.
When Shawn moved his family from Nova Scotia to British Columbia to work for Luxury, he incurred the following expenses:

<table>
<thead>
<tr>
<th>Expense</th>
<th>Cost</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping</td>
<td>$25,000</td>
<td>1</td>
</tr>
<tr>
<td>Storage</td>
<td>2,800</td>
<td>2</td>
</tr>
<tr>
<td>Travel</td>
<td>5,250</td>
<td>3</td>
</tr>
<tr>
<td>Administrative</td>
<td>500</td>
<td>4</td>
</tr>
<tr>
<td>Old house</td>
<td>37,000</td>
<td>5</td>
</tr>
<tr>
<td>Temporary housing</td>
<td>1,500</td>
<td>6</td>
</tr>
<tr>
<td>New house</td>
<td>352,300</td>
<td>7</td>
</tr>
<tr>
<td>Moving truck</td>
<td>4,000</td>
<td>8</td>
</tr>
</tbody>
</table>

$428,350

Notes:

1. Shipping costs were to move the family belongings from Nova Scotia.
2. The belongings were stored in British Columbia for one month.
3. Travel was for flights for Shawn, his wife and their three children from Nova Scotia to British Columbia.
4. Administrative expenses were: changing address – $150; and replacing driver’s licences – $350.
5. Costs incurred for the six months it took to sell the Nova Scotia home were: utilities – $8,000; legal fees – $1,500; realtor commission – $15,000; property taxes – $6,000; and insurance – $6,500.
6. Shawn’s family rented a house in British Columbia for one month before buying a house.
7. Expenses related to the new home purchase were: purchase price – $350,000; legal fees – $2,000; and utilities connection – $300.
8. A moving truck was rented to move the stored belongings to the new home.

Shawn’s 2018 income totalled $140,000: $90,000 from his job in Nova Scotia and $50,000 from Luxury.
End of Exam
1. PRESENT VALUE OF TAX SHIELD FOR AMORTIZABLE ASSETS

Present value of total tax shield from CCA for a new asset acquired before November 21, 2018

\[
CTd \left( \frac{2+k}{2(1+k)} \right) = \frac{CdT}{(d+k)} \left( \frac{1+0.5k}{1+k} \right)
\]

Present value of total tax shield from CCA for a new asset acquired after November 20, 2018

\[
\frac{CdT}{(d+k)} \left( \frac{1+1.5k}{1+k} \right)
\]

Notation for above formula:

- \( C \) = net initial investment
- \( T \) = corporate tax rate
- \( k \) = discount rate or time value of money
- \( d \) = maximum rate of capital cost allowance

2. SELECTED PRESCRIBED AUTOMOBILE AMOUNTS

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum depreciable cost — Class 10.1</td>
<td>$30,000 + sales tax</td>
</tr>
<tr>
<td>Maximum monthly deductible lease cost</td>
<td>$800 + sales tax</td>
</tr>
<tr>
<td>Maximum monthly deductible interest cost</td>
<td>$300</td>
</tr>
<tr>
<td>Operating cost benefit — employee</td>
<td>26¢ per km of personal use</td>
</tr>
<tr>
<td>Non-taxable automobile allowance rates</td>
<td></td>
</tr>
<tr>
<td>— first 5,000 kilometres</td>
<td>55¢ per km</td>
</tr>
<tr>
<td>— balance</td>
<td>49¢ per km</td>
</tr>
</tbody>
</table>
3. INDIVIDUAL FEDERAL INCOME TAX RATES

For 2018

If taxable income is between | Tax on base amount | Tax on excess
--- | --- | ---
$0 and $46,605 | $0 | 15%
$46,606 and $93,208 | $6,991 | 20.5%
$93,209 and $144,489 | $16,544 | 26%
$144,490 and $205,842 | $29,877 | 29%
$205,843 and any amount | $47,670 | 33%

For 2019

If taxable income is between | Tax on base amount | Tax on excess
--- | --- | ---
$0 and $47,630 | $0 | 15%
$47,631 and $95,259 | $7,145 | 20.5%
$95,260 and $147,667 | $16,908 | 26%
$147,668 and $210,371 | $30,534 | 29%
$210,372 and any amount | $48,718 | 33%

4. SELECTED Indexed AMOUNTS FOR PURPOSES OF COMPUTING INCOME TAX

Personal tax credits are a maximum of 15% of the following amounts:

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic personal amount</td>
<td>$11,809</td>
</tr>
<tr>
<td>Spouse, common-law partner, or eligible dependant amount</td>
<td>11,809</td>
</tr>
<tr>
<td>Age amount if 65 or over in the year</td>
<td>7,333</td>
</tr>
<tr>
<td>Net income threshold for age amount</td>
<td>36,976</td>
</tr>
<tr>
<td>Canada employment amount</td>
<td>1,195</td>
</tr>
<tr>
<td>Disability amount</td>
<td>8,235</td>
</tr>
<tr>
<td>Canada caregiver amount for children under age 18</td>
<td>2,182</td>
</tr>
<tr>
<td>Canada caregiver amount for other infirm dependants age 18 or older (maximum amount)</td>
<td>6,986</td>
</tr>
<tr>
<td>Net income threshold for Canada caregiver amount</td>
<td>16,405</td>
</tr>
<tr>
<td>Adoption expense credit limit</td>
<td>15,905</td>
</tr>
</tbody>
</table>

Other indexed amounts are as follows:

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical expense tax credit — 3% of net income ceiling</td>
<td>$2,302</td>
</tr>
<tr>
<td>Annual TFSA dollar limit</td>
<td>5,500</td>
</tr>
<tr>
<td>RRSP dollar limit</td>
<td>26,230</td>
</tr>
<tr>
<td>Lifetime capital gains exemption on qualified small business corporation shares</td>
<td>848,252</td>
</tr>
</tbody>
</table>
5. PRESCRIBED INTEREST RATES (base rates)

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan. 1 – Mar. 31</th>
<th>Apr. 1 – June 30</th>
<th>July 1 – Sep. 30</th>
<th>Oct. 1 – Dec. 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>2017</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

This is the rate used for taxable benefits for employees and shareholders, low-interest loans, and other related-party transactions. The rate is 4 percentage points higher for late or deficient income tax payments and unremitted withholdings. The rate is 2 percentage points higher for tax refunds to taxpayers, with the exception of corporations, for which the base rate is used.

6. MAXIMUM CAPITAL COST ALLOWANCE RATES FOR SELECTED CLASSES

- **Class 1**: 4% for all buildings except those below
- **Class 1**: 6% for buildings acquired for first use after March 18, 2007 and ≥ 90% of the square footage is used for non-residential activities
- **Class 1**: 10% for buildings acquired for first use after March 18, 2007 and ≥ 90% of the square footage is used for manufacturing and processing activities

- **Class 8**: 20%
- **Class 10**: 30%
- **Class 10.1**: 30%
- **Class 12**: 100%

- **Class 13**: Original lease period plus one renewal period (minimum 5 years and maximum 40 years)
- **Class 14**: Length of life of property
- **Class 14.1**: 5% for property acquired after December 31, 2016
- **Class 17**: 8%
- **Class 29**: 50% Straight-line
- **Class 43**: 30%
- **Class 44**: 25%
- **Class 45**: 45%
- **Class 50**: 55%
- **Class 53**: 50%