UNIVERSITY OF BRITISH COLUMBIA PETER A. ALLARD SCHOOL OF LAW

FINAL EXAMINATION - APRIL 2020

LAW 407.002 Taxation

Professor Wei Cui

EXAMSOFT PASSWORD:

EXAMSOFT RESUME CODE:

TOTAL MARKS: 100

WRITING TIME ALLOWED: 3 HOURS 30 MINUTES PREPARATION TIME ALLOWED: 10 MINUTES

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THIS EXAMINATION CONSISTS OF 1 NARRATIVE, WITH 4 QUESTIONS IDENTIFIED AT THE END

(ALLOCATION OF MARKS INDICATED IN BRACKETS AFTER EACH QUESTION)

Amrit Agrawal works at Microsoft's Vancouver office. Although she was a talented computer scientist, she has stayed with Microsoft long enough to have risen to a relatively senior management position, and spends most of her work time as a member of a leadership team that supervises both the technical and client-services aspect of Microsoft's operations in Canada. Her partner, Alyssa Fung, is also a computer scientist, and is the founder of a start-up tech company in Vancouver that has begun to commercialize several proprietary voice- and face-recognition algorithms.

In fall 2019, Amrit and Alyssa decided to buy a house in Fairview and rent out the 3bedroom apartment that they previously lived in, across False Creek, in Yaletown. The Fairview home represents a major upgrade in their living comfort, while maintaining the Yaletown apartment represents a major investment. To finance these changes in consumption and investment, Amrit sold, for \$150 per share, 1,000 shares of the Microsoft shares she owned. She had acquired these shares in 2016 by exercising stock options that had been granted to her when she first joined Microsoft in 2012 (the shares had vested in 2015). When she was granted the options, the market price for Microsoft shares was \$30 per share, and Microsoft set the exercise price for options issued to new employees then also at \$30 per share. When Amrit exercised the options in 2016, Microsoft shares were \$60 per share.

Amrit did two other things in 2019 in preparation for financing the purchase of her new home with Alyssa. First, Amrit had paid down most of the mortgage that she had taken out on her Yaletown apartment, with only \$250,000 of principal left. The apartment was purchased for \$850,000, and is now worth \$1.3 million. Amrit realized that she could easily cover larger interest payments with rents collected on the apartment. Therefore, she decided to re-finance her mortgage on the apartment, replacing it with a \$600,000 mortgage bearing a 3.5% interest rate. She used most of the proceeds from the new mortgage towards making the down payment for the much more expensive new house she bought with Alyssa.

Second, Amrit sold a collection of limited-edition photographic prints, which she had acquired a decade ago for \$20,000. The artist who produced these prints had been proclaimed by some as poised to become the next Jeff Wall (a Vancouver artist best known for his large-scale back-lit cibachrome photographs), but his work never quite took off and indeed came to seem outdated. While Amrit still loves Jeff Wall, she's gotten tired of the prints she owned, too, and decided that moving to a new home was a good occasion for parting ways with them. She sold the prints for \$18,000.

2019 was a busy year for Alyssa as well. Her company, Sharper Analytics Inc., won its first contract for providing a new face-recognition service to a major Canadian telecommunications company. The contract, for a total amount of \$1.5 million, is for service to be provided over the course of 3 years, and would commence on January 1, 2020. The new client made a prepayment of \$500,000 to Sharper Analytics in November 2019. In early December,

Sharper Analytics used \$300,000 of the cash from the new client to purchase new computing equipment and accessory software.

Also, Alyssa was successful in luring a talented software engineer, Hiba Selbi, from the University of Waterloo to join the team at Sharper Analytics. Sharper Analytics paid Hiba a signing bonus of \$50,000 in September 2019, and, in December 2019, advanced Hiba a 1-year, interest-free home relocation loan for another \$50,000. Hiba formally started working for Sharper Analytics on January 1, 2020.

In early- and mid-January 2020, media reports about a deadly new coronavirus in the Chinese city of Wuhan became increasingly prominent. By January 23, the Chinese government ordered a complete lock-down in Wuhan. Different varieties of masks, ranging from ordinary surgical masks to N95 respirator to specialized anti-toxic masks, became scarce in China. In late January, multiple friends of Alyssa's who live in China—former classmates, colleagues, and even childhood acquaintances—contacted her to see if she could purchase masks and other personal protective equipment (PPE) in North America and send them to China. Alyssa would of course be reimbursed. Alyssa searched online, and in less than two weeks, purchased \$900 worth of surgical masks and goggles that were shipped to her in Vancouver. However, this proved too long a wait given the rapid changes in circumstances. The Canadian federal government shipped 16 tons of PPE to China between February 4 and 9, and some of Alyssa's friends in China told her that they had secured the needed PPE in other ways. Alyssa thus never got to send the PPE she bought in February to China.

The shadow of COVID1-9 moved to Canada in mid-February. In early and mid-March, medial supply shortage was reported in Vancouver and other provinces. Where available, the prices of the various accessories Alyssa purchased in January jumped: it would have cost her \$6,000 to order the same quantity of items—but they were no longer available. Alyssa promptly donated all of the PPE she had received in February to the University of British Columbia hospital on March 15. Moreover, she began to communicate with her contacts in China about purchasing PPE in China to be shipped to Canada. While some Chinese institutions are donating to Canadian partners like UBC, many also saw a need to secure commercial supplies while COVID-19 spread around the world. Alyssa worked with a trusted friend in Shanghai to identify a certified Chinese exporter willing to sell the needed PPE, and also found a company in Vancouver, Superior Medical Healthcare (SPM), who promised to help distribute the supply once it arrives. Alyssa had no interest in profiting from such arrangements, but she also felt that her contribution should be more along the lines of devoting her time and energy to help, rather than donating financially.

To make things as simple as possible in very challenging circumstances, Alyssa spent \$30,000 of her own money to place an order, in her own name, with the Chinese exporter on March 20, to be shipped to SPM directly. SPM agreed to reimburse Alyssa for the cost of the PPE to the extent it is able to distribute them, and if SPM ends up making a profit on such distribution, it would share with Alyssa 1/3 of the profit, net of any additional expenses incurred by SPM. The order, miraculously, arrived in Vancouver on April 8, 2020. At the time of this writing, SPM is still waiting to hear back from the BC Health Ministry on the terms of procurement for supplies held by SPM, including but not limited to the order Alyssa secured.

By early April 2020, Amrit's and Alyssa's work is already deeply transformed by the COVID-19 pandemic. Sharper Analytics received notification from its new client that projects requiring Sharper Analytics' service will likely be delayed due to new business priorities as well as uncertainties. However, others approached Sharper Analytics to see if any of its algorithms might be adapted to build contact tracing capacity in Canada. Soon, the company entered into a short-term contract with another company to become a subcontractor on a project commissioned by the Federal Government, consulting on the development of contact tracing software. Under the contract, Sharper Analytics would bill its client on an hourly basis. The contract also came with standard reimbursements for disbursements including meals and transportation during the evenings.

Alyssa is used to working from home while Amrit worked late hours at Microsoft's downtown office. Now, however, Amrit must also work from home, even while her workload at Microsoft has spiked since early March, as new needs for cloud computing and online conferencing surge and as the company undertakes new and urgent projects to support Canada's healthcare sector. Both now work around the clock in their new Fairview home. A planned kitchen renovation is delayed. Most evenings, Alyssa orders food from Vancouver restaurants, many of whom now rely on take-out orders to maintain some level of operation. She charges the cost of her meal orders to her client. In the meantime, Microsoft decided to compensate its overworked employees and support local businesses at the same time, by entering into arrangements with several local restaurants (including the likes of Nightingale, Kissa Tanto, etc.) to deliver food to employees, at the company's expense. Amrit began using this service occasionally.

Please analyze the consequences of the transactions described above for Amrit, Alyssa, and Sharper Analytics under the Income Tax Act (ITA), taking the ITA as it stood at the end of 2019—thus ignoring any tax policy measures that the Federal Government might adopt in response to the COVID-19 pandemic. In particular, please:

- Explain the consequences in 2019 for Amrit of the sale of her Microsoft shares, the sale of the limited-edition prints, and of the refinancing of the Yaletown apartment (25 points);
- Examine what income inclusions and deductions are triggered for Sharper Analytics in 2019 by its new service contract, its purchase of new equipment, and the payments to Hiba; please consider the relevance of the accelerated investment incentives enacted in 2018 (30 points);
- 3. Review the consequences of Alyssa's initiatives in 2020 buying, donating, and sourcing PPE, including what consequences might follow if SPM were to be able to sell the PPE at a profit (**25 points**); and

4. Set out the tax consequences for Alyssa, Sharper Analytics, and Amrit for Alyssa's and Amrit's consumption of take-out meals while working from home in April 2020 (**20 points**).

END OF EXAMINATION