Part A: Choose the best answer for the following 19 questions. Make only one choice for each question. (38 marks)

1. Social insurance programs are:
   A) government programs intended to protect families against economic hardships.
   B) private insurance policies to protect families from hardships caused by government actions.
   C) private insurance policies that cover gaps in government-provided health care.
   D) programs to help unemployed people have a social life.

2. Which of the following is a government transfer?
   A) wages paid to members of the Canadian Parliament
   B) purchases of tanks for the army
   C) Canada Pension Plan payments to retired auto workers
   D) payments to contractors for repairs on highways

3. Government payments to households for which no good or service is provided in return are called:
   A) transfer payments.
   B) government purchases.
   C) consumption expenditures.
   D) investment expenditures.

4. The largest source of federal tax revenues is:
   A) property taxes.
   B) personal income taxes.
   C) corporate income taxes.
   D) sales taxes.

5. A change in taxes or a change in government transfers affects consumption through a change in:
   A) autonomous consumption.
   B) the marginal propensity to save.
   C) disposable income.
   D) government spending.
6. The basic equation of national income accounting is GDP = C + I + G + X - IM. When the government uses fiscal policy to make changes to taxes and transfers, this policy primarily affects:
   A) IM.
   B) I.
   C) C.
   D) X.

7. Suppose the economy is in a recessionary gap. To move equilibrium aggregate output closer to the level of potential output, the best fiscal policy option is to:
   A) decrease government purchases.
   B) decrease taxes.
   C) decrease government transfers.
   D) increase real interest rates.

8. If the current level of real GDP lies above potential GDP, then an appropriate fiscal policy would be to ________, which will shift the AD curve to the ________.
   A) decrease government purchases; right.
   B) increase government purchases; left.
   C) decrease government purchases; left.
   D) raise tax rates; right.

Use the following to answer questions 9-15:

**Figure: Inflationary and Recessionary Gaps**

9. At E1, the economy:
   A) is in equilibrium.
   B) has an inflationary gap.
   C) has a recessionary gap.
   D) is booming.
10. At $E_2$, the economy:
   A) is in equilibrium.
   B) has an inflationary gap.
   C) has a recessionary gap.
   D) is booming.

11. At $E_3$, the economy:
   A) is in equilibrium.
   B) has an inflationary gap.
   C) has a recessionary gap.
   D) is stagnating.

12. A movement from $AD_t$ to $AD_t$ could be caused by:
   A) increased government purchases.
   B) increased government transfers.
   C) lower tax rates.
   D) increased government purchases, increased government transfers, or lower tax rates.

13. A movement from $AD_t$ to $AD_t$ could be caused by:
   A) increased government purchases.
   B) increased government transfers.
   C) higher tax rates.
   D) increased government purchases, increased government transfers, or higher tax rates.

14. Which of the following measures an inflationary gap?
   A) $Y_3 - Y_1$.
   B) $Y_3 - Y_2$.
   C) $Y_2 - Y_1$.
   D) $Y_3 - Y_6$.

15. Which of the following measures a recessionary gap?
   A) $Y_3 - Y_1$.
   B) $Y_3 - Y_2$.
   C) $Y_2 - Y_1$.
   D) $Y_3 - Y_6$. 
Use the following to answer questions 16-19:

**Figure: Short- and Long-Run Equilibrium**

16. Using the accompanying figure, which of the following would be the appropriate response of the government upon viewing the state of the economy?
   A) Expand aggregate demand by increasing taxes to close the inflationary gap.
   B) Reduce aggregate demand by cutting taxes to close the inflationary gap.
   C) Expand aggregate demand by cutting taxes to close the recessionary gap.
   D) Reduce aggregate demand by increasing taxes to close the recessionary gap.

17. If the economy is at equilibrium at $E_1$, then it is experiencing:
   A) a recessionary gap.
   B) an inflationary gap.
   C) a high level of unemployment.
   D) a liquidity trap.

18. If the economy is at equilibrium at $E_1$, then the government should use ________ fiscal policy to shift the aggregate demand curve to the ________.
   A) expansionary; right
   B) expansionary; left
   C) contractionary; right
   D) contractionary; left

19. If the economy is at equilibrium at $E_1$, then the appropriate policy to return the economy to potential output would be to:
   A) increase transfer payments.
   B) decrease transfer payments.
   C) increase taxes.
   D) decrease government spending.
Part B. Answer all questions. MUST show all work clearly and neatly. Only work done in the space provided will be marked. (20 marks)

1. Multiplier process:

(a). Assume $G$ increases by 50, MPC = 0.75, $t = 0.20$. Fill in the table: (8 marks)

<table>
<thead>
<tr>
<th></th>
<th>$\Delta C$</th>
<th>$\Delta I_{planned}$</th>
<th>$\Delta G$</th>
<th>$\Delta Y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st round</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>2nd round</td>
<td>$25(0.75(1-t))$</td>
<td>0</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>3rd round</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Total $\Delta$</td>
<td>75</td>
<td>0</td>
<td>50</td>
<td>125</td>
</tr>
</tbody>
</table>

$$\Delta I_{planned} = \frac{30}{1 - 0.75(1-0.20)}$$

(b). Assume Transfer increases by 50, MPC = 0.75, $t = 0.20$. Fill in the table: (8 marks)

<table>
<thead>
<tr>
<th></th>
<th>$\Delta C$</th>
<th>$\Delta I_{planned}$</th>
<th>$\Delta G$</th>
<th>$\Delta Y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st round</td>
<td>30</td>
<td>0</td>
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<td>18</td>
</tr>
<tr>
<td>3rd round</td>
<td>10.8</td>
<td>0</td>
<td>0</td>
<td>10.8</td>
</tr>
<tr>
<td>Total $\Delta$</td>
<td>75</td>
<td>0</td>
<td>0</td>
<td>75</td>
</tr>
</tbody>
</table>
(c). Compare the sizes of the change in GDP and multiplier between (a) and (b). (4 marks)

1. \( \Delta Y \) is bigger with \( \Delta G \) than \( \Delta TR \).

2. \( \Delta G \): multiplier. \[ \frac{\Delta Y}{\Delta G} = \frac{1.25}{5} = 2.5 \]
   \[ = \frac{1}{1 - M\Pi C (1 - t)} \]

   \( \Delta TR \): multiplier. \[ \frac{\Delta Y}{\Delta TR} = \frac{7.5}{50} = 1.5 \]
   \[ = \frac{M\Pi C (1 - t)}{1 - M\Pi C (1 - t)} \]