Part A: Choose the best answer for the following 15 questions. Make only one choice for each question. (30 marks)

1. Which of the following statements is correct?
   A). required reserves = (total deposits) \times (excess reserve ratio)
   B). required reserves = (total reserves) \times (excess reserve ratio)
   C). required reserves = (total deposits) \times (required reserve ratio)
   D). required reserves = (total deposits) / (required reserve ratio)

2. The functions of money are
   A). medium of exchange, unit of account, and store of value.
   B). medium of exchange, the ability to buy goods and services, and the ability to pay off debts.
   C). medium of exchange, the ability to buy goods and services, and checking accounts.
   D). credit cards, checking accounts, currency, and coins.

3. If you shop for a car online and compare car prices across dealerships, money is functioning as a
   A). medium of exchange.
   B). unit of account.
   C). means of payment.
   D). store of value.

4. Required reserve ratios are the minimum amount of
   A). deposits any one bank is allowed to accept as percentage of its capital.
   B). reserves any one bank must hold as a percentage of its loans.
   C). reserves any one bank must hold as a percentage of its deposits.
   D). deposits any one bank must hold as a percentage of its reserves.

5. The required reserve ratio is 10 percent and Charlie deposits $3,000 in her checking account. The bank must
   A). increase reserves by $3,000.
   B). increase reserves by $300.
   C). decrease reserves by $3,000.
   D). decrease reserves by $300.

6. Banks can make loans as long as they have
   A). deposits.
   B). reserves.
   C). required reserves.
   D). excess reserves.

7. The Banks of the Mississippi has excess reserves of $20,000, required reserves of $80,000 and the required reserve ratio is 5 percent. What is the total amount of deposits in this bank?
   A). $5,000
   B). $1,000,000
   C). $1,600,000
   D). $100,000

\[ R = \frac{RR}{0.05} \]
\[ \text{Deposits} = \frac{RR}{RR} = \frac{80,000}{0.05} = 1,600,000 \]
8. The Commerce Bank of Beverly Hills has total deposits of $1,000,000 and total reserves of $220,000. The required reserve ratio is 10 percent. The bank’s excess reserves are
A). $22,000
B). $120,000
C). $100,000
D). $1,000,000

9. The CPI measures the prices of the
A). different baskets of consumer goods and services in different years.
B). different baskets of consumer goods and services in same year.
C). same basket of consumer goods and services in same year.
D). same basket of goods and services in different years.

10. The largest component in the CPI market basket is
A). medical care.
B). housing.
C). education.
D). food and beverages.

11. Consumers in Inland consume only two goods, magazines and pizzas. If they spend $50 on magazines and $90 on pizzas a month, how many magazines and pizzas are in their CPI market basket if the price of a magazine is $5 and the price of a pizza is $9.
A). 7 magazines and 5 pizzas
B). 10 magazines and 5 pizzas
C). 5 magazines and 7 pizzas
D). 10 magazines and 10 pizzas

12. People over the age 16 with full-time jobs are considered to be
A). unemployed.
B). not in the labor force.
C). in the labor force and employed.
D). in the labor force unemployed.

13. The size of the labor force is
A). equal to the size of the population.
B). less than the number of employed workers if the number of unemployed workers is small enough.
C). less than the number of unemployed workers if the number of employed workers is small enough.
D). greater than the number of employed workers as long as there are some unemployed workers.

14. Pat Malloy takes care of her two year old daughter. She is not looking for a job. She is considered as
A). unemployed.
B). not in the labor force.
C). employed.
D). a discouraged worker.

15. A discouraged worker is
A). a person who is not happy with his or her job.
B). someone who works part time but wants full-time work.
C). someone who is asked to work overtime every day.
D). someone who does not have a job but has given up looking.
Part B: Answer all questions. **MUST** show all work on the space provided, otherwise, no mark will be given. (34 marks)

1. Assume the economy only produces three products: Pop, Chocolate bars, Running shoes. 2004 is the base year. (24 marks)

<table>
<thead>
<tr>
<th>Goods</th>
<th>Price per unit</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2004</td>
<td>2005</td>
</tr>
<tr>
<td>Pop</td>
<td>$1</td>
<td>$1.5</td>
</tr>
<tr>
<td>Chocolate bars</td>
<td>$2</td>
<td>$3</td>
</tr>
<tr>
<td>Running shoes</td>
<td>$40</td>
<td>$50</td>
</tr>
</tbody>
</table>


\[
N. \text{GDP}_{2004} = 10 \times 1 + 30 \times 2 + 40 \times 2 = \$870
\]

\[
N. \text{GDP}_{2005} = 14 \times 1.5 + 32 \times 3 + 25 \times 4 = \$1367
\]


\[
R. \text{GDP}_{2004} = N. \text{GDP}_{2004} = \$870
\]

\[
R. \text{GDP}_{2005} = 14 \times 1.5 + 32 \times 3 + 25 \times 4 = \$1078
\]

(c). Calculate the nominal growth rate and the real growth rate. (4 marks)

\[
N. \text{Growth rate} = \frac{1367 - 870}{870} \times 100\% = 57.13\%
\]

\[
R. \text{Growth rate} = \frac{1078 - 870}{870} \times 100\% = 23.91\%
\]
(d). Calculate the GDP Deflators for both years. (4 marks)

\[ \text{Deflator}_{04} = 100 \]

\[ \text{Deflator}_{05} = \frac{1367}{1078} \times 100 = 126.81 \]

(e). If the basket only contains pop and chocolate bars. Calculate the CPI for both years. Using these figures to find the inflation rate for 2005, and interpret your figure. (8 marks)

basket includes: 10 pop + 30 bars

\[ \text{CPI}_{04} = 100 \]

\[ \text{CPI}_{05} = \frac{1.5 (10) + 3 (30)}{1 (10) + 2 (30)} \times 100 = 150 \]

\[ \text{inflation rate}_{05} = \frac{150 - 100}{100} \times 100\% = 50\% \]

18. P level ↑ by 50% from 2004 to 2005.
2. In which category of Canada’s GDP (C, I, G, X, M or N for none of the above) are each of the following transactions directly recorded in Canada’s GDP? Make sure you indicate the correct negative or positive sign. (10 marks)

(a) I buy some flour to make bread for my family  
(b) A bakery buys a new van to make deliveries  
(c) The bakery sells some bagels to a visitor from England  
(d) A Canadian buys some bagels from the bakery  
(e) The bakery buys a bread-making machine made in the U.S.