國立中山大學 108 學年度
碩士暨碩士專班招生考試試題

科目名稱：總體經濟學【經濟所碩士班】

I.　Multiple-Choice Questions (52%, 4 points each, 單選題)

1. We learn the following about a ski resort: ticket sales $100M, snow making expenses $70M, wages $20M, interest on business loans $5M, and profits $5M. What is the contribution to GDP using the product approach?
(A) $70M.　(B) $80M.　(C) $95M.　(D) $100M.

2. Suppose that GDP is equal to 1000, national saving is equal to 200, the current account deficit is equal to 100, and the government budget deficit is equal to 50. Private savings must equal?
(A) 150.　(B) 200.　(C) 250.　(D) 300.

3 Suppose an economy produces only food and clothing, and that price and quantity data are given in the table below. If Year 2 is the base year, what is the net growth rate of *real* GDP?
(A) 35%.　(B) 44%.　(C) 58%.　(D) 110%.

Year 1		
goods	quantity	price
food	20	$6
clothing	10	$8

Year 2		
goods	quantity	price
food	25	$10
clothing	20	$7

4. Jim's Nursery produces and sells $1100 worth of flowers. He uses no intermediate inputs and pays his workers $700 in wages, $100 in taxes, pays $200 in interest on a loan. Jim's value added to GDP is?
(A) $1100.　(B) $400.　(C) $300.　(D) $100.

5. If the savings rate falls in the Solow growth model
(A) steady state capital per worker rises.
(B) the steady state growth rate in output increases.
(C) per worker output falls in the steady state.
(D) per capita consumption falls in the short run.

6. An increase in second-period income results in
(A) an increase in first-period consumption, an increase in second-period consumption, and an increase in saving.
(B) an increase in first-period consumption, a decrease in second-period consumption, and an increase in saving.
(C) a decrease in first-period consumption, an increase in second-period consumption, and an increase in saving.
(D) an increase in first-period consumption, an increase in second-period consumption, and a decrease in saving.

7. We know the following about a tie manufacturer: tie sales $1,300, cotton purchases $750, wages $400, interest on business loans $100, and profits $50. What is the contribution to GDP of this producer using the income approach?
(A) $550.　(B) $500.　(C) $450.　(D) $400.

2. Suppose the following national income accounts identity describes the economy

$y = c + i$, where y, c and i are, respectively, the per worker production, consumption and investment.

(a) Solve for the condition that describes the Golden Rule, and explain the meaning of the condition. [8 points]

(b) Consider the three savings rates 0.2, 0.5 and 0.8. If a policymaker intends to choose one that maximizes the consumption per worker in the steady state. Suppose output per worker is governed by the production function $y = k^{1/2}$, and the depreciation of capital is $\delta = 0.1$. Which of the three savings rates is the best choice for the policymaker? [12 points]

3. Please explain how the output supply is constructed and why it is positively related to the real interest rate. Besides, when the current TFP (total factor productivity) increases, how is the output supply affected? [10 points]