T1

(1) 名义$GDP_{(2016)}$ $=100\times10+200\times1+500\times0.5=1450$(美元)

(2) 名义$GDP_{(2017)}$ $=110\times10+200\times1.5+450\times1=1850$(美元)

(3) 实际$GDP_{(2016)}$ $=1450$(美元)

实际$GDP_{(2017)}$ $=110\times10+200\times1+450\times0.5=1525$(美元)

$$\frac{1525-1450}{1450}\times100\%\approx5.17\%$$

(4) 实际$GDP_{(2016)}$ $=100\times10+200\times1.5+500\times1=1800$(美元)

实际$GDP_{(2017)}$ $=1850$(美元)

$$\frac{1850-1800}{1800}\times100\%\approx2.78\%$$

(5) 不对。不完全取决于基期价格，最主要还是产品数量、价格的变化。

(6) $GDP_{折算指数(2016)}=\frac{1450}{1450}\times100\%=100\%$

$GDP_{折算指数(2017)}=\frac{1850}{1525}\times100\%\approx121.31\%$

T_2

(1) $NDP = GDP - 折旧$

$= GDP - (总投资 - 净投资) = 4300$(亿美元)

(2) $GDP = C + I + G + NX$

$\therefore NX = 4800 - 3000 - 800 - 960 = 40$(亿美元)

(3) $BS = T - G$

$\therefore T = BS + G = 30 + 960 = 990$(亿美元)

(4) $DPI = NDP - T = 4300 - 990 = \overset{3310}{\cancel{3400}}$(亿美元)

(5) $S = DPI - C = 3310 - 3000 = 310$(亿美元)

T_3

(1) $S_p = DPI - C = 4100 - 3000 = 1100$(亿元)

(2) $S_g = T - G = BS = -200$(亿元)

$S_r = M - X = 100$(亿元)

$I = S_p + S_g + S_r = 1000$(亿元)

(3) $GDP = C + I + G + NX$

$\therefore G = 5000 - 3000 - 1000 + 100 = 1100$(亿元)

T4

(1) NI = 500 + 250 + 25 + 140 + 200 = 1115 (亿美元)

(2) NDP = NI + 间接税 = 1115 + 15 = 1130 (亿美元)

(3) GDP = NDP + 折旧 = 1130 + 20 = 1150 (亿美元)

(4) PI = NI - 社会保险金 - 公司利润 + 政府转移支付 + 红利
= 1115 - 10 - 250 + 50 + 100 = 1005 (亿美元)

附加练习

T1 (1) 1.34亿 + 860万 = 1.426 亿

(2) 成年人数 = 1.426亿 + 7090万 = 2.135亿

$\frac{1.426}{2.135} \times 100\% \approx 66.79\%$

(3) $\frac{0.086}{1.426} \times 100\% \approx 6.03\%$

T2

(1) $GDP_{(2001)} = 10 \times 9 + 5 \times 6 = 120$

$GDP_{(2002)} = 12 \times 10 + 6 \times 8 = 168$

$GDP_{(2003)} = 10 \times 12 + 8 \times 10 = 200$

(2) 实际 $GDP_{(2001)} = 120$

实际 $GDP_{(2002)} = 10 \times 10 + 8 \times 5 = 140$

实际 $GDP_{(2003)} = 12 \times 10 + 10 \times 5 = 170$

(3) GDP平减指数$_{(2001)}$ $= \frac{120}{120} \times 100\% = 100\%$

GDP平减指数$_{(2002)} = \frac{168}{140} \times 100\% = 120\%$

GDP平减指数$_{(2003)} = \frac{200}{170} \times 100\% \approx 117.65\%$

通胀率$_{(2002)} = \frac{120\% - 100\%}{100\%} = 20\%$

通胀率$_{(2003)} = \frac{117.65\% - 120\%}{120\%} \approx -1.96\%$

(4)

$CPI_{(2002)} = \frac{2\times12+1\times6}{2\times10+1\times5} \times 100\% = 120\%$

$CPI_{(2003)} = \frac{2\times10+1\times8}{2\times10+1\times5} \times 100\% = 112\%$

计算CPI中时产量不同

T3

(1) $CPI_{(2010)} = 100\%$ $CPI_{(2011)} = \frac{50\times5+20\times150+80\times3}{50\times4+20\times100+80\times2} \times 100 = 147.9$

$CPI_{(2012)} = \frac{50\times6+20\times300+80\times2}{50\times4+20\times100+80\times2} = 273.37$

(2) 通胀率$_{2011} = \frac{CPI_{(2011)} - CPI_{(2010)}}{CPI_{(2010)}} \times 100\% = 47.9\%$

通胀率$_{2012} = \frac{CPI_{(2012)} - CPI_{(2011)}}{CPI_{(2011)}} \times 100\% = 85.06\%$

(3) 衣服。因为三个商品中衣服的价格变化最大。

(4) $CPI_{(2010)} = 100$ $CPI_{(2011)} = \frac{50\times5+20\times150+80\times3+5000\times\frac{1}{2}}{50\times4+20\times100+80\times2} \times 100 = 253.81$

$CPI_{(2012)} = \frac{50\times6+20\times300+80\times2+10000}{50\times4+20\times100+80\times2} \times 100 = 697.46$