# TEST NUMBER 2 <br> Time allowed: 90 Minutes 

Total Points: 40

Question 1 (10 points)
Below is an excerpt from the cash flow statement of a firm for fiscal year 2003:
Adjustments to reconcile netincome to net cash provided by
operating activities:
Depreciation and amortization ..... 250
Amortization of software ..... 400
Tax benefits of employee ..... 450stock plans
Special charges ..... 200
(Gains)/losses on investments ..... 20
Change in operating assets and liabilities:
Receivables ..... 600
Inventories ..... 250
Pension assets ..... (475)
Other assets ..... 70
Accounts payable ..... (50)
Pension liabilities ..... 85
Other liabilities ..... 200
Net cash provided by ..... _3,500 operating activities
Cash flows from investing activities:
Payments for plant and other$(2,000)$
property
Proceeds from disposition of plant ..... 800
and other propertyInvestment in software(500)
Purchases of marketable securities ..... $(1,500)$
and other investments
Proceeds from disposition of ..... 1,200marketable securities andother investments
Net cash used in investing
activities$(2,000)$
Additional information:
Cash interest receipts ..... 110
Cash interest payments ..... (200)
From the reformulated equity statement:
Shareholders' equity December 31, 2002 ..... 5,500
Shareholders' equity December 31, 2003 ..... 4,760
Net payout to shareholders ..... 2,500

The firm's tax rate is $35 \%$.

## Required:

a. Calculate free cash flow for 2003.
b. Calculate net payments to debt holders and issuers for 2003 .
c. Calculate comprehensive income for 2003 .

Question 2 (30 points).
Part A

The following is a condensed version of the statement of shareholders' equity for Dell Computer Corporation for fiscal year ending January 31, 2003 (in millions of dollars):

| Balance at February 1, 2002 | 4,694 |
| :--- | ---: |
| Net income | 2,122 |
| Unrealized gain on debt investments | 26 |
| Unrealized loss on derivative instruments | $(101)$ |
| Foreign currency translation gain | $\boxed{4,051}$ |
| Comprehensive income | 418 |
| Shares issued on exercise of options, | $(2,290)$ |
| including tax benefits of \$260 |  |
| Repurchase of 50 millions shares | $\underline{\underline{4,873}}$ |
|  |  |

Other information:

1. Dell's tax rate is $35 \%$
2. The repurchase occurred when the stock traded at $\$ 28$ per share.

## Required:

Prepare a reformulated statement of shareholders' equity for 2003 for Dell Computer Corporation. The reformulated statement should identify comprehensive income.

## Part B

The following is extracted from Dell's balance sheet at January 31, 2003 (in millions of dollars):
Net financial assets $\quad 9,167$
Common equity ( 2,579 million shares outstanding) 4,873

Analysts are forecasting consensus earnings per share of $\$ 1.01$ for the year ending January 31, 2004.
a. Calculate net operating assets at January 31, 2003.
b. Net financial assets are expected to earn an after-tax return of $4 \%$ in 2004. What is the forecast of operating income implicit in the analysts' eps forecast?
c. Forecast the residual operating income for 2004 that is implicit in the analysts' forecast. Use a required annual return for operations of $9 \%$.
d. Dell's shares are currently trading at $\$ 34$ each. With the above information, value the shares under the following set of scenarios using residual income methods:
(i) Sales will grow at 5\% per year after 2004.
(ii) Operating assets and operating liabilities with both grow at $5 \%$ per year after 2003.
(iii) Operating profit margins (after tax) will be the same as these forecasted for 2004.
e. Under the same scenarios, forecast free cash flow for 2004.
f. Under the same scenarios, forecast abnormal growth in operating income for 2005.
g. Show that, with a long term growth rate of $5 \%$, the following formula will give the same value as that in part (d) of the question:

$$
V_{0}^{E}=O I_{1} x \frac{1}{0.09}\left[\frac{G_{2}-g}{1.09-g}\right]+\text { Net Financial Assets }
$$

where $\mathrm{G}_{2}$ is the (one plus) cum-dividend growth rate in operating income two years ahead and g is (one plus) the long-term growth rate.

