

Q-1. Solution: B.

Preferred stock dividends of \$70,000 ($0.07 \times 1,000,000$)

$$\begin{aligned} \text{BEPS} &= \frac{\text{Net income} - \text{preferred dividends}}{\text{Weighted average number of common shares outstanding}} \\ &= \frac{1,250,000 - 70,000}{1,000,000} = 1.18 \end{aligned}$$

$$\begin{aligned} \text{DEPS} &= \frac{\text{Net income} - D_{ps} + \text{converted preferred dividends}}{\text{WACSO} + \text{number of shares converted}} \\ &= \frac{1,250,000 - 70,000 + 70,000}{1,000,000 + 1000 \times 25} = 1.21 \end{aligned}$$

Because DEPS for the company is 1.21, which is larger than its BEPS, which is 1.18, so the preferred stock is an anti-dilutive stock, DEPS for the company is 1.18

Q-2. Solution: C.

Incremental shares issued from stock option exercise (Treasury Stock Method)		
(Shares issued at exercise price – Shares purchased with cash received at average market price) = $100,000 \text{ shares} - (100,000 \times \$5) / \$20 = 75,000 \text{ shares}$		
Weighted average shares outstanding		
Original shares	2,000,000	$2,000,000 \text{ sh} \times 12 \text{ months} / 12 \text{ months}$
Incremental shares issued assuming options were exercised	75,000	$75,000 \text{ sh} \times 12 \text{ months} / 12 \text{ months}$
Shares issued, April 1	225,000	$300,000 \text{ sh} \times 9 \text{ months} / 12 \text{ months}$
Shares repurchased, July 1	(50,000)	$100,000 \text{ sh} \times 6 \text{ months} / 12 \text{ months}$
Weighted average shares o/s	2,250,000	
Diluted EPS		
Net income – preferred dividends	$\frac{\$5,000,000 - \$0}{2,250,000} = \$2.22/\text{share}$	
Weighted average number of shares		

Q-3. Solution: A.

Because both the preferred shares and the bonds are dilutive, they should both be converted to calculate the diluted EPS. Diluted EPS is the lowest possible value.

	Basic EPS	Diluted EPS: Bond Converted	Diluted EPS: Preferred Converted	Diluted EPS: Both Converted
Net income	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Preferred dividends	-\$20,000	-\$20,000	0	0
After-tax cost of		\$3,840		\$3,840

interest $8\% \times \$160,000 \times (1 - 30\%)$				
Numerator	\$980,000	\$983,840	\$1,000,000	\$1,003,840
Average common shares outstanding	100,000	100,000	100,000	100,000
Preferred converted			10,000	10,000
Bond converted		20,000		20,000
Denominator	100,000	120,000	110,000	130,000
EPS	\$9.80	\$8.20	\$9.09	\$7.72

Q-4. Solution: C.

Metric	(£'000)
Ending retained earnings	821,000
Less: opening retained earnings	(580,000)
Add back: dividends paid	<u>60,000</u>
Net income	301,000
Comprehensive income	246,000
OCI = Comprehensive income – net income	<u>(55,000)</u> LOSS

Q-5. Solution: B.

All categories have realized gains or losses treated in the same way; they are reported on the income statement. It is the unrealized gains and losses that are included in other comprehensive income (in equity) for available-for-sale securities carried at market value.