SHARE BUYBACK-VARIOUS CALCULATIONS

QUESTION NO.1A*(Exam Question)(8 Marks)* A Ltd. has a surplus cash of ₹ 90 lakhs and wants to use 30% of it for buyback shares. The Finance Manager of the Company estimates that its share price after repurchase is likely to be 10% above the buyback price; if the buyback route is taken. The number of shares outstanding at present is 10 lakhs and the current EPS is ₹ 3.Market capitalisation of the company is ₹ 200 lakhs after buyback.

(a) The price at which the shares can be repurchased.

(b) The number of shares that can be re-purchased.

(c) The impact of share re-purchase on the EPS, assuming the net income is same.

Solution:

(a) Price At Which the Shares Can Be Repurchased :

Let P be the buyback price decided by A Ltd.

MPS After Buyback x No. of shares After Buyback = 200,00,000.

$\Rightarrow$ 1.1 x P x [Existing Number of Share - Buy Back Share] = 200,00,000

$$\Rightarrow 1.1 \times P \times \left[10{,}00{,}000 - \frac{\text{Total Amount Available For Buyback}}{\text{Buyback Price}}\right] = 200{,}00{,}000.$$

$$\Rightarrow 1.1 \times P \times \left[10{,}00{,}000 - \frac{30\% \text{ of } 90{,}00{,}000}{P}\right] = 200{,}00{,}000 \Rightarrow 1.1P \left[10{,}00{,}000 - \frac{27{,}00{,}000}{P}\right] = 200{,}00{,}000$$

$\Rightarrow$ 11,00,000P - 2,970,000 = 200,00,000 $\Rightarrow$ P = 20.88.

(b) Numbers of shares to be bought back :

$$\text{Numbers of shares to be bought back} = \frac{27\text{ Lakhs}}{20.88} = 1.29 \text{ Lakhs(approximately}$$

(c) EPS After Buyback :

New Equity Shares i.e. Equity Share After Buy back = (10 - 1.29) lakhs = 8.71 lakhs

$$\text{EPS After Buyback} = \frac{\text{Total Earning After Buyback}}{\text{Total Number Of Equity Share After Buyback}} = \frac{3 \times 10 \text{ Lakhs}}{8.71 \text{ Lakhs}} = \frac{30 \text{ Lakhs}}{8.71 \text{ Lakhs}} = \text{Rs.}3.44$$

Aditional Analysis: Why total earnings after buyback is same. Since it is clearly given in question that net income or earning after buyback will assumed to be same.

QUESTION NO.2 *(5 Marks)* Eager Ltd. has a market capitalization of ₹ 1,500 crores and the current market price of its share is ₹ 1,500. It made a PAT of ₹ 200 crores and the Board is considering a proposal to buy back 20% of the shares at a premium of 10% to the current market price. It plans to fund this through a 16% bank loan. **You are required to calculate** the post buy back Earnings Per Share (EPS). The company's corporate tax rate is 30%.

Solution:

Existing No. of Equity Shares = ₹ 1500 crore / ₹1,500 = 1 Crore

No. of shares to be bought back	= 1 Crore x 0.20	= 20 Lakh
Price at which share to be bought back	= ₹ 1,500 + 10% of ₹ 1,500	= ₹ 1,650
Amount required for Buyback of Shares	= ₹ 1,650 x 20 Lakh	= ₹ 330 Crore
Amount of Loan @ 16%	= ₹ 330 Crore	

Statement showing Post Buyback EPS

Profit before tax (₹ 200 crore/ 0.70)	₹285.7143 crore
Less: Interest on Loan (₹ 330 Crore x 16%)	₹ 52.8000 crore
Profit before Tax	₹ 232.9143 crore

Tax	₹ 69.8743 crore
Profit after Tax (PAT)	₹ 163.0400 crore
No. of Shares Post buyback	80 Lakh
EPS (Post Buyback) (₹ 163.0400 Crore/80.00 Lakh)	₹ 203.80

EXTRA PRACTICAL QUESTION

QUESTION NO.7 SM Limited has a market capitalization of ₹ 3,000 crore and the current earnings per share (EPS) is ₹ 200 with a price earnings ratio (PER) of 15. The Board of directors is considering a proposal to buy back 20% of the shares at a premium which can be supported by the financials of the company. The Boards expects post buy back market price per share (MPS) of ₹ 3057. Post buy back PER will remain same. The company proposes to fund the buy back by availing 8% bank loan since available resources are committed for expansion plans. Applicable income tax rate is 30%. **You are required to calculate:**

(i) The interest amount which can be paid for availing the bank loan, **(ii)**The loan amount to be raised and **(iii)**The premium per share and percentage premium paid. over the current MPS.

Solution:

Current Market Price of Share = ₹ 200 x 15 = ₹ 3,000 **;**No. of shares = $\frac{\text{Market capitalisation}}{\text{Market price of share}} = \frac{3{,}000 \text{ crore}}{3{,}000} = 1 \text{ crore}$

No. of Shares proposed to Buyback = 20% of 1 core = 20 Lakh ; Post Buy back per share (₹) = ₹ 3,057

PE Ratio = 15

Post Buy back EPS = $\frac{3057}{15}$ = ₹ 203.80 ; EAT = ₹ 203.80 x 80 Lakh = ₹ 16,304 Lakh

Pre Tax Earning after Buyback = $\frac{16{,}304}{(1-0.30)}$ = ₹ 23,291.429 Lakh

Earning Before Buyback = ₹ 200 x 100 = 20,000 Lakh

Pre Tax Earning before Buyback = $\frac{20{,}000}{(1-0.30)}$ = ₹ 28571.429 Lakh

Particulars	
Pre Tax Earning before Buyback	₹ 28571.429 Lakhs
Pre Tax Earning after Buyback	₹ 23291.429 Lakhs
Interest which can be paid for availing bank loan	₹ 5,280.00 Lakhs
Loan Amount raised = $\frac{5280 \text{ lakhs}}{0.08}$	₹ 66,000 Lakhs
Amount paid for Buy back of Share	₹ 66,000 Lakhs
No. of Shares Bought back	20 Lakhs
Share Buyback price per share = 66,000/20 Lakhs	₹ 3,300
Current Market Price per share (₹ 200 × 15)	₹ 3,000
Premium	₹ 300

% Premium over current market price = $\frac{300}{30000}$ x 100 = 10%