INDAS 33 –

EARNINGS PER SHARE

(TOTAL NO. OF QUESTIONS – 13)

INDEX

RTPs QUESTIONS

Q1. (MAY 18)

P Ltd. is a subsidiary company of ABC Ltd. It prepares both Separate financial statements (SFS) and consolidated financial statements (CFS) for the year ending on 31st March, 20X1. It has net profit after tax of Rs 20,00,000 as per SFS & Rs 16,00,000 as per CFS. Share capital of P Ltd. is 2,00,000 shares of Rs 10 each. ABC Ltd. has acquired 80% shares of P Ltd. Accountant of P Ltd. had calculated following Basic EPS for its SFS:

Calculation of Basic EPS in its SFS	
Net Profit after tax	Rs 16,00,000
Number of Equity shares attributable to Parent company ABC Ltd. (2,00,000 x 80%)	1,60,000 shares
Basic EPS	Rs 10 per share

Examine the correctness of the above presentation of Basic EPS.

SOLUTION

(i) As per Ind AS 33 "Earnings per Share", when an entity presents both consolidated financial statements (cfs) and separate financial statements (sfs) prepared in accordance with Ind AS 110, Consolidated Financial Statements, and Ind AS 27, Separate Financial Statements, respectively, the disclosures required by this Standard shall be presented both in the cfs and sfs. In cfs, such disclosures shall be based on consolidated information and in sfs such disclosures shall be based on information given in separate financial statements.

(ii) An entity shall not present EPS based on the information given in separate financial statements in cfs and vice versa.

(iii) Also, paragraph 9 of the standard states that an entity shall calculate basic earnings per share amounts for profit or loss attributable to ordinary equity holders of the parent entity and, if presented, profit or loss from continuing operations attributable to those equity holders.

(iv) Further, paragraph A1 of Appendix A of Ind AS 33 states that for the purpose of calculating earnings per share based on the cfs, profit or loss attributable to the parent entity refers to profit or loss of the consolidated entity **after** adjusting for non- controlling interests.

Hence, with inference from above mentioned points, in the given case, the presentation of Basic EPS by the Accountant of P Ltd. on the basis of consolidated financial statements in its separate financial statements is not correct. The correct presentation of Basic EPS would be as follows:

Calculation of Basic EPS of P Ltd. in SFS	
Net Profit after tax	Rs 20,00,000
No. of share issued	2,00,000 shares
Basic EPS	**Rs 10 per share**

Q2. (RTP MAY 19 & MTP OCT. 20)

An entity issues 2,000 convertible bonds at the beginning of Year 1. The bonds have a three-year term, and are issued at par with a face value of Rs 1,000 per bond, giving total proceeds of Rs 2,000,000. Interest is payable annually in arrears at a nominal annual interest rate of 6 per cent. Each bond is convertible at any time up to maturity into 250 ordinary shares. The entity has an option to settle the principal amount of the convertible bonds in ordinary shares or in cash.

When the bonds are issued, the prevailing market interest rate for similar debt without a conversion option is 9 per cent. At the issue date, the market price of one ordinary share is Rs 3. Income tax is ignored.

Calculate basic and diluted EPS when

Profit attributable to ordinary equity holders of the parent entity Year 1	Rs 1,000,000
Ordinary shares outstanding	1,200,000
Convertible bonds outstanding	2,000

SOLUTION:

Allocation of proceeds of the bond issue:

Liability component (Refer Note 1)	Rs 1,848,122
Equity component	Rs 151,878
	Rs 2,000,000

The liability and equity components would be determined in accordance with Ind AS 32. These amounts are recognised as the initial carrying amounts of the liability and equity components. The amount assigned to the issuer conversion option equity element is an addition to equity and is not adjusted.

Basic earnings per share Year 1:

Rs 1,000,000/ 1,200,000= Rs 0.83 per ordinary share

Diluted earnings per share Year 1:

It is presumed that the issuer will settle the contract by the issue of ordinary shares. The dilutive effect is therefore calculated in accordance with the Standard.

(Rs1,000,000 + Rs166,331)/(1,200,000 + 500,000) = Rs 0.69 per ordinary share

Notes:

1. *This represents the present value of the principal and interest discounted at 9% – Rs 2,000,000 payable at the end of three years; Rs 120,000 payable annually in arrears for three years.*
   [(1,20,000 x 2.53) + (20,00,000 x 0.772)] = 18,48,122
2. *Profit is adjusted for the accretion of Rs 166,331 (Rs 1,848,122 × 9%) of the liability because of the passage of time. However, it is assumed that interest @ 6% for the year has already been adjusted.*
3. *500,000 ordinary shares = 250 ordinary shares x 2,000 convertible bonds*

Q3. (MAY 20 & Newly Added in ICAI Module for May 22 onwards)

CAB Limited is in the process of preparation of the consolidated financial statements of the group for the year ending 31st March, 20X3 and the extract of the same is as follows:

Particulars	Attributable to CAB Limited	Non-controlling interest	Total (Rs in '000)
Profit for the year	39,000	3,000	42,000
Other Comprehensive Income	5,000	Nil	5,000
Total Comprehensive Income	**44,000**	**3,000**	**47,000**

The long-term finance of the company comprises of the following:

1. *20,00,00,000 equity shares at the beginning of the year and the company has issued 5,00,00,000 shares on 1st July, 20X2 at full market value.*
2. *8,00,00,000 irredeemable preference shares. These shares were in issue for the whole of the year ended 31st March, 20X3. The dividend on these preference shares is discretionary.*
3. *Rs 18 crores of 6% convertible debentures issued on 1st April, 20X1 and repayable on 31st March, 20X5 at par. Interest is payable annually. As an alternative to repayment at par, the holder on maturity can elect to exchange their convertible debentures for 10 crores ordinary shares in the company. On 1st April, 20X1, the prevailing market interest rate for four-year convertible debentures which had no right of conversion was 8%. Using an annual discount rate of 8%, the present value of Rs 1 payable in four years is 0.74 and the cumulative present value of Rs 1 payable at the end of years one to four is 3.31. In the year ended 31st March, 20X3, CAB Limited declared an ordinary dividend of 0.10 paise per share and a dividend of 0.05 paise per share on the irredeemable preference shares.*

Compute the following:

- *The finance cost of convertible debentures and its closing balance as on 31st March, 20X3 to be presented in the consolidated financial statements.*

- The basic and diluted earnings per share for the year ended 31st March, 20X3.

Assume that income tax is applicable to CAB Limited and its subsidiaries at 25%.

SOLUTION

1. Calculation of the liability and equity components on 6% Convertible debentures:

Present value of principal payable at the end of 4th year (Rs 1,80,000 thousand x 0.74)

= Rs 1,33,200 thousand

Present value of interest payable annually for 4 years (Rs 1,80,000 thousand x 6% x 3.31)

= Rs 35,748 thousand

Total liability component = Rs 1,68,948 thousand

Therefore, equity component = Rs. 1,80,000 thousand – Rs 1,68,948 thousand

= Rs 11,052 thousand

Calculation of finance cost and closing balance of 6% convertible debentures:

Year	Opening balance Rs in '000	Finance cost @ 8% Rs in '000	Interest paid @ 6% Rs in '000	Closing balance Rs in '000
	a	b = a x 8%	c	d = a + b – c
31.3.20X2	1,68,948	13,515.84	10,800	1,71,663.84
31.3.20X3	1,71,663.84	13,733.11	10,800	1,74,596.95

Finance cost of convertible debentures for the year ended 31.3. 20X3 is Rs **13,733.11 thousand** and closing balance as on 31.3. 20X3 is Rs **1,74,596.95** thousand.

Calculation of Basic EPS **Rs in '000**

Profit for the year	39,000
Less: Dividend on preference shares (80,000 thousand x Rs 0.05)*	(4,000)
Profit attributable to equity shareholders	**35,000**

* Only dividend on preference shares will be reduced because the net amount after all payments will be available for distribution to equity shareholders.

Weighted average number of shares = 20,00,00,000 + {5,00,00,000 x (9/12)} = 23,75,00,000 shares or 2,37,500 thousand shares

Basic EPS = Rs 35,000 thousand / 2,37,500 thousand shares = Rs 0.147

Calculation of Diluted EPS **Rs in '000**

Profit for the year		39,000
Less: Dividend on preference shares (80,000 x 0.05)		(4,000)
		35,000
Add: Finance cost (as given in the above table)*	13,733.11	
Less: Tax @ 25%	(3,433.28)	10,299.83
		45,299.83

* **Note-** if debentures are converted to equity shares, then the interest will not be payable. This saving of interest payment will be available for equity holders. However, tax will be paid on this amount.

Weighted average number of shares = 20,00,00,000 + {5,00,00,000 x (9/12)} + 10,00,00,000 = 33,75,00,000 shares or 3,37,500 thousand shares

Diluted EPS = Rs 45,299.83 thousand / 3,37,500 thousand shares = Rs 0.134

Q4. (NOV 21)

Following information pertains to an entity for the year ending 31 st March 20X1:

Net profit for the year	Rs. 12,00,000
Weighted average number of Equity shares outstanding during the year	5,00,000 shares
Average market price per share during the year	Rs. 20
Weighted average number of shares under option during the year	1,00,000 shares
Exercise price per share under option during the year	Rs. 15

Calculate basic and diluted earnings per share.

SOLUTION

Calculation of earnings per share

	Earnings	Shares	Per share
Profit attributable to equity holders	Rs. 12,00,000		
Weighted average shares outstanding during year 20X1		5,00,000	
Basic earnings per share			Rs. 2.40
Weighted average number of shares under option		100,000	
Weighted average number of shares that would have been issued at average market price: (1,00,000 × Rs. 15.00) ÷ Rs. 20.00	Refer Note	(75,000)	
Diluted earnings per share	**Rs. 1,200,000**	**525,000**	**Rs. 2.29**

Note: Earnings have not increased because the total number of shares has increased only by the number of shares (25,000) deemed to have been issued for no consideration, as shown below -

Total options = 1,00,000 @ Rs.15 each = 15,00,000

Equivalent to paid up shares = 15,00,000 / 20 = 75,000 shares

Therefore, paid element = 75,000 shares and bonus element = 25,000 shares.

To determine dilution, we consider only the bonus element .i.e. 25,000 shares.

QS. (RTP Nov. 22)

Company S is a subsidiary of Company P. Following facts are in respect of Company S:

- *Company S has 10,000 ordinary shares and 1,000 options outstanding, of which Company P owns 9,000 shares and 500 options, respectively.*
- *The options have an exercise price of Rs. 40.*
- *The average market price of Company S's ordinary share was Rs. 50 in 20X1.*
- *In 20X1, Company S's profit was Rs. 30,000.*

Following facts are in respect of Company P:

- *Company P has 5,000 ordinary shares outstanding.*
- *In 20X1, Company P's profit (excluding any distributed and undistributed earnings of subsidiaries) was Rs. 7,000.*
- *The options outstanding are dilutive at P's level.*

Determine the diluted EPS of Company P for the year 20X1. Ignore income tax.

SOLUTION

To determine the diluted EPS of Company P, the diluted EPS of Company S has to be calculated first.

Calculation of Company S's diluted EPS:

Company S's earnings for the period	Rs. 30,000
Weighted average ordinary shares	10,000
Incremental shares (refer W.N.)	200
Company S's diluted EPS	Rs. 30,000/ (10,000 + 200)
	Rs. 2.94

Calculation of Company P's diluted EPS:

Company P's earning for the period	Rs. 7,000
Company P's share of Company S's earning attributable to ordinary shares [(9,000 /10,000) x (2.94 x 10,000)]	Rs. 26,460
Company P's share of Company S's earning attributable to options [(500 /1,000) x (2.94 x 200)]	Rs. 294
Company P's weighted average ordinary shares outstanding	5,000
Company P's diluted EPS = (7,000 + 26,460 + 294) / 5,000	Rs. 6.75

Working Note:

Computation of Incremental shares related to weighted average options outstanding:

All options are dilutive because their exercise price is below the average market price of Company S's ordinary shares for the period.

The incremental shares are calculated as follows:

Shares issued on assumed exercise of options	1,000
Less: Shares that would be issued at average market Price [(40 x 1,000)/50]	(800)
Incremental shares	200

MTPs QUESTIONS

Q6. (APRIL 19 – 8 Marks)

Calculate Subsidiary's and Group's Basic EPS and Diluted EPS, when

Parent:	
Profit attributable to ordinary equity holders of the parent entity	Rs. 12,000 (excluding any earnings of, or dividends paid by, the subsidiary)
Ordinary shares outstanding	10,000
Instruments of subsidiary owned by the parent	800 ordinary shares
	30 warrants exercisable to purchase ordinary shares of subsidiary
	300 convertible preference shares
Subsidiary:	
Profit	Rs. 5,400
Ordinary shares outstanding	1,000
Warrants	150, exercisable to purchase ordinary shares of the subsidiary
Exercise price	Rs. 10
Average market price of one ordinary share	Rs. 20
Convertible preference shares	400, each convertible into one ordinary share
Dividends on preference shares	Re 1 per share
No intercompany eliminations or adjustments were necessary except for dividends.	
Ignore income taxes. Also, ignore classification of the components of convertible financial instruments as liabilities and equity or the classification of related interest and dividends as expenses and equity as required by Ind AS 32.	

SOLUTION

Subsidiary's earnings per share

Basic EPS = Rs.5.00 calculated as under:

[Rs. 5,400 (a) – Rs.400 (b)] / 1,000 (c)

Diluted EPS = Rs.3.66 calculated as under:

Rs. 5,400 (d) / [(1,000 + 75 (e) + 400(f))]

Notes:

(a) Subsidiary's profit attributable to ordinary equity holders.

(b) Dividends paid by subsidiary on convertible preference shares.

(c) Subsidiary's ordinary shares outstanding.

(d) Subsidiary's profit attributable to ordinary equity holders (Rs. 5,000) increased by Rs. 400 preference dividends for the purpose of calculating diluted earnings per share because after conversion, it will be treated as ordinary shares.

(e) Incremental shares from warrants, calculated: [150 x 10 / 20]. We only add the bonus element because that is the actual increase in no. of shares without any consideration.

(f) Subsidiary's ordinary shares assumed outstanding from conversion of convertible preference shares, calculated: 400 convertible preference shares × conversion factor of 1.

Consolidated earnings per share		
Basic EPS	Rs. 1.63 calculated	$\frac{\text{Rs. } 12{,}000(a) + \text{Rs. } 4{,}300(b)}{10{,}000\ (c)}$
Diluted EPS	Rs. 1.61 calculated:	$\frac{12{,}000 + 2{,}928(d) + 55(e) + 1{,}098(f)}{10{,}000}$

(a) Parent's profit attributable to ordinary equity holders of the parent entity.

(b)

Particulars	**Subsidiary**	**Subsidiary share for CFS**
Subsidiary EPS	5 per share	5 x 800 shares held = 4,000
Preference Dividend	1 per share	1 x 300 shares held = 300
additional earnings for Conso EPS		4,300

(c) Parent's ordinary shares outstanding.

(d) Parent's proportionate interest in subsidiary's earnings attributable to ordinary shares, calculated: (800 ÷ 1,000) × (1,000 shares × Rs. 3.66 per share).

(e)

Particulars	**Subsidiary**	**Subsidiary share for CFS**
Total warrants	150	30
Equivalent shares from warrants	75	
Earnings from warrants for conso EPS		75 x 3.66 x (30/150) = 55

(f) Parent's proportionate interest in subsidiary's earnings attributable to convertible preference shares, calculated: (300 ÷ 400) × (400 shares from conversion × Rs. 3.66 per share).

Q7. (OCT 19 – 5 Marks)

Mittal Motors Limited is preparing financials for the year ended March 31, 20X2. The Company had some queries in preparation of certain data that is required to be presented in the financials. As the retainer of the Company, please advise the company for the following issues:

(i) Mittal Motors has issued 10,00,000 numbers of 9% cumulative preference shares. The Company has arrears of Rs. 15 crores of preference dividend as on March 31, 20X2, it includes current year arrears of Rs. 1.75 crores. The Company did not declare any dividend for equity shareholders as well as for preference shareholders. What is the amount of dividend to be reduced from profit or loss for the year for calculating basic Earnings Per Share?

(ii) Further Mittal Motors has also issued certain convertible debentures, which are outstanding as at the year end. For the purpose of computation of weighted average number of shares (to arrive at diluted EPS) when should the dilutive potential shares be deemed to have been converted into shares?

A. At the start of the period.

B. The date of issue of the potential shares

C. At the start of the period or, if later, the date of the issue of the potential shares

D. At the end of the period.

SOLUTION

(i) As per Ind AS 33 "Earnings per share", "The after-tax amount of preference dividends that is deducted from profit or loss is the after-tax amount of the preference dividends for cumulative preference shares required for the period, whether or not the dividends have been declared. The amount of preference dividends for the period does not include the amount of any preference dividends for cumulative preference shares paid or declared during the current period in respect of previous periods".

In the given case, the amount of preference dividends Rs.1.75 crores declared for the year ended March 31, 20X2 (i.e., the current period) is to be deducted from profit or loss for calculating EPS.

(ii) As per para 36 of Ind AS 33 "Earnings per share', "For the purpose of calculating diluted earnings per share, the number of ordinary shares shall be the weighted average number of ordinary shares plus the weighted average number of ordinary shares that would be issued on the conversion of all the dilutive potential ordinary shares into ordinary shares. Dilutive potential ordinary shares shall be deemed to have been converted into ordinary shares at the **beginning of the period** or, if later, the date of the issue of the potential ordinary shares".

Q8. (MAY 20 – 4 Marks)

Explain why weighted average number of shares is used in the calculation of earnings per share and how it is calculated.

Following is the data for company XYZ in respect of the number of equity shares during the financial year

20X1-20X2. Find out the number of shares for the purpose of calculation of basic EPS.

S. No.	Date	Particulars	Number of shares
1	1-Apr-20X1	Opening balance of outstanding equity shares	1,00,000
2	15-Jun-20X1	Issue of equity shares	75,000
3	8-Nov-20X1	Conversion of convertible preference shares in Equity	50,000
4	22-Feb-20X2	Buyback of shares	(20,000)
5	31-Mar-20X2	Closing balance of outstanding equity shares	205,000

SOLUTION

As per para 20 of Ind AS 33, Earnings per share, the weighted average number of ordinary shares outstanding during the period reflects the possibility that the amount of shareholders' capital varied during the period as a result of a larger or smaller number of shares being outstanding at any time. The weighted average number of ordinary shares outstanding during the period is the number of ordinary shares outstanding at the beginning of the period, adjusted by the number of ordinary shares bought back or issued during the period multiplied by a time-weighting factor. The time weighting factor is the number of days that the shares are outstanding as a proportion of the total number of days in the period; a reasonable approximation of the weighted average is adequate in many circumstances.

Formula

The weighted average number of shares is calculated as follows:

Number of shares x (number of days the shares were held during the year / 365)

Following the above formula, the weighted average number of shares for calculation of EPS for the year 20X1-20X2 will be as follows:

Sr. No.	Date	Particulars	No of shares	No of days shares were outstanding	Weighted average no of shares
1	1 April 20X1	Opening balance of outstanding equity shares	1,00,000	365	1,00,000
2	15 June 20X1	Issue of equity shares	75,000	290	59,589
3	8 November 20X1	Conversion of convertible preference shares in Equity	50,000	144	19,726
4	22 February 20X2	Buy back of shares	(20,000)	(38)*	(2,082)
5	31 March 20X2	Closing balance of outstanding equity shares	2,05,000		1,77,233

*These shares had already been considered in the shares issued. The same has been deducted assuming that the bought back shares have been extinguished immediately.

Q9. (MARCH 21 – 5 Marks)

ABC Ltd. has 1,000,000 Rs. 1 ordinary shares and 1,000 Rs. 100 10% convertible bonds (issued at par), each convertible into 20 ordinary shares on demand, all of which have been in issue for the whole of the reporting period.

ABC Ltd.'s share price is Rs. 4.50 per share and earnings for the period are Rs. 500,000. The tax rate applicable to the entity is 21%.

Calculate basic EPS, earnings per incremental share for the convertible bonds and diluted EPS

SOLUTION

Basic EPS is Rs. 0.50 per share (ie 500,000/1,000,000)

The earnings per incremental share for the convertible bonds is calculated as follows:

Earnings effect = No. of bonds x nominal value x interest cost x (1 – applicable tax rate)

= 1,000 x 100 x 10% x (1- 0.21) = Rs. 7,900.

(interest saved, net of tax)

Incremental shares calculation

Assume all bonds are converted to shares, even though this converts Rs. 100 worth of bonds into 20 shares worth only Rs. 90 and is therefore not economically rational.

This gives 1000 x 20 = 20,000 additional shares.

Earnings per incremental share = Rs. 7,900 / 20,000 = Rs. 0.395

Diluted EPS = (Rs. 500,000 + Rs. 7,900) / (1,000,000 + 20,000) = Rs. 0.498 per share.

Q10. (OCTOBER 21 – 7 Marks)

Sohan has been recently hired in Zio Life Limited. Since he is facing difficulty in computation of EPS as per Ind AS 33, guide him by discussing the steps for the calculation of Basic EPS and Diluted EPS alongwith the necessary computations for EPS of Year 1.

The following basic facts relate to Company Zio Life Limited.

- Net profit for Year 1 is Rs. 46,00,000.
- The number of ordinary shares outstanding on 1st April Year 1 is 30,00,000.

The following facts are also relevant for Year 1.

- On 1st April, Zio Life Limited issues 20,00,000 three-year term convertible bonds for Rs. 1 each.
- Zio Life Limited has an option to settle the principal amount in ordinary shares (every 10 bonds are convertible into one ordinary share) or cash on settlement date.
- The principal amount of the bonds is classified as an equity instrument and the interest is classified as a financial liability.
- The interest expense relating to the liability component of the bonds is Rs. 1,800.
- The interest expense is tax-deductible. The applicable income tax rate is 40%.

SOLUTION

The EPS computations for Year 1 as per Ind AS 33 are as follows.

Basic EPS	Diluted EPS
1. Determine the numerator No adjustment is necessary until the convertible bonds are converted and ordinary shares are issued. The numerator is net profit ie. Rs. 46,00,000.	**1. Identify Potential Ordinary Shares(POSs)** The convertible bonds are the only POSs.
2. Determine the denominator There is no change in the number of outstanding shares during the year. The denominator is therefore 30,00,000.	**2. For each POS, calculate Earnings perIncremental Share (EPIS)** Since Zio Life Limited has the choice of settlement, for the purpose of determining the EPIS, it assumes the share-settlement assumption. **Potential adjustment to the numerator forEPIS:** The convertible bonds, when settled in ordinary shares, would increase profit or loss for the year by the post-tax amount of the interest expense: (Interest expense on the convertible bonds)x (1 - income tax rate) = (Rs. 1,800) x (1 - 40%) = Rs. 1,080 **Potential adjustment to the denominatorfor EPIS:** The convertible bonds, when settled in ordinary shares, would increase the number of outstanding shares by 2,00,000 (20,00,000 / 10). **EPIS is calculated as follows:** EPIS = 1,080 / 2,00,000 = 0.01
3. Determine basic EPS Basic EPS = 46,00,000 / 30,00,000 = 1.53	**3. Rank the POSs** This step does not apply, because the convertible bonds are the only class ofPOSs.
	4. Identify dilutive POSs and determinediluted EPS The potential impact of convertible bonds isdetermined as follows. (Refer W.N. below)
	Accordingly, Zio Life Limited includes the impactof the convertible bonds in diluted EPS. Diluted EPS = Rs. 1.44

Working Note:

Calculation of Diluted EPS

	Earnings (Rs.)	Weighted average number of shares	Per Share (Rs.)	Dilutive?
Basic EPS	46,00,000	30,00,000	1.53	
Convertible bonds	1,080	2,00,000		
Total	46,01,080	32,00,000	1.44	Yes

QUESTIONS PAST EXAM PAPERS

Q11. (NOVEMBER 20)

The following information is available relating to Space India Limited for the Financial Year 2019-20.

Net profit attributable to equity shareholders	₹ 90,000
No. of equity shares outstanding	16,000
Average fair value of one equity share during the year	₹ 90

Potential Ordinary Shares:

Options	900 options with exercise price of ₹ 75
Convertible Preference Shares	7,500 shares entitled to a cumulative dividend of ₹ 9 per share. Each preference share is convertible into 2 equity shares.
Applicable corporate dividend tax	8%
10% Convertible Debentures of ₹ 100 each	₹ 10,00,000 and each debenture is convertible into 4 equity shares
Tax rate	25%

You are required to compute Basic and Diluted EPS of the company for the Financial Year 2019-20.

SOLUTION

i. Basic Earnings per share

		Year ended 31.3.2020
Net profit attributable to equity shareholders	(A)	Rs. 90,000
Number of Equity shares outstanding	(B)	16,000
Earnings per share	(A/B)	Rs. 5.625

ii. Diluted earnings per share

Options are most dilutive as their earnings per incremental share is nil. Hence, for the purpose of computation of diluted earnings per share, options will be considered first. 10% convertible debentures being second most dilutive will be considered next and thereafter convertible preference shares will be considered (as per W.N.).

	Net profit attributable to equity shareholders Rs.	**No. of equity shares**	**Net Profit attributable per share Rs.**	
Net profit attributable to equity shareholders	90,000	16,000	5.625	
Options		150		
	90,000	16,150	5.572	Dilutive
10% Convertible debentures	75,000	40,000		
	1,65,000	56,150	2.939	Dilutive

Convertible Preference Shares	72,900	15,000		
	2,37,900	71,150	3.344	Anti-Dilutive

Since diluted earnings per share is increased when taking the convertible preference shares into account (Rs. 2.939 to Rs. 3.344), the convertible preference shares are anti- dilutive and are ignored in the calculation of diluted earnings per share for the year ended 31 March 2020. Therefore, diluted earnings per share for the year ended 31 March 2020 is Rs. 2.939.

Working Note:

Calculation of incremental earnings per share and allocation of rank

	Increase in earnings (1)	**Increase in number of equity shares (2)**	**Earnings per incremental Share (3) = (1) ÷ (2)**	**Rank**
	Rs.		**Rs.**	
Options				
Increase in earnings	Nil			
No. of incremental shares issued for no consideration [900 x (90-75)/90]		150	Nil	1
Convertible Preference Shares				
Increase in net profit attributable to equity shareholders as adjusted by attributable dividend tax * [(Rs. 9 x 7,500) + 8% (Rs. 9 x 7,500)]	72,900			
No. of incremental shares (2 x 7,500)		15,000	4.86	3
10% Convertible Debentures				
Increase in net profit [(Rs. 10,00,000 x 10% x (1 – 0.25)]	75,000			
No. of incremental shares (10,000 x 4)		40,000	1.875	2

Note: Grossing up of preference share dividend has been ignored here. At present dividend distribution tax has been abolished. However, the question has been solved on the basis of the information given in the question.

Alternatively,

Increase in earnings for equity holders = saving due to non payment to preference shareholders (net of tax)

= 9 x 7,500 = 67,500 - 8% = 62,100

Incremental no. of shares = 15,000

Hence, Incremental EPS = 4.14

Q12. (JULY 21)

On 31st March, 2019 the issued share capital of SB Limited consisted of 20,00,000 ordinary shares of Rs. 1 each. On 1st July 2019, the Company issued Rs. 25,00,000 of 8% convertible loan stock for cash at par. Each Rs. 100 nominal of the loan stock may be converted, at any time during the years ended 2024 to 2027, into the number of ordinary shares set out below:

- *31st March, 2024: 135 Ordinary Shares*
- *31st March, 2025: 130 Ordinary Shares*
- *31st March, 2026: 125 Ordinary Shares*
- *31st March, 2027: 120 Ordinary Shares*

If the loan stock is not converted by 2027, they would be redeemed at par.

It is assumed that the written equity conversion option is accounted for as a derivative liability and marked to market through profit or loss. The change in the options fair value reported on 31st March 2020 and 31st March 2021 amounted to losses of Rs. 5,000 and Rs. 5,300 respectively. Further, it is assumed that there are no tax consequences arising from these losses.

The profit before interest, fair value movements and taxation for the year ended 31st March, 2020 and 2021 amounted to Rs. 16,50,000 and Rs. 17,90,000 respectively and relate wholly to continuing operations. The rate of tax for both the periods is 33% (including cess and surcharge if any).

Calculate Basic and Diluted EPS for 31st March 2020 & 31st March 2021.

SOLUTION

Calculation of PAT (earnings)	**2021**	**2020**
Trading results	**Rs.**	**Rs.**
A. Profit before interest, fair value movements and tax	17,90,000	16,50,000
B. Interest on 8% convertible loan stock	(2,00,000) = 25,00,000 x 8%	(1,50,000) = 9/12 × 2,00,000
C. Change in fair value of embedded option	(5,300)	(5,000)
Profit before tax	15,84,700	14,95,000
Taxation @ 33% on (A-B)	(5,24,700)	(4,95,000)
Profit after tax	10,60,000	10,00,000
Calculation of basic EPS		
Number of Equity shares outstanding	20,00,000	20,00,000
Earnings	10,60,000	10,00,000
Basic EPS	**53 paise**	**50 paise**

Calculation of diluted EPS

Test whether convertibles are dilutive:

The saving in after-tax earnings, resulting from the conversion of Rs. 100 nominal of loan stock, amounts to

[25,00,000 x 8% x (1 - 0.33) / 25,000] + [5,300 / 25,000] = 5.57

Here, we add back 5,300 also because if the loan stock is considered as ordinary shares, there will be no fair value measurement and hence, no such loss needs to be recognized.

There will then be 135 extra shares in issue.

Therefore, the incremental EPS is 4 paise (ie. Rs. 5.57 / 135). As this incremental EPS is less than the basic EPS at the continuing level, it will have the effect of reducing the basic EPS of 53 paise. Hence the convertibles are dilutive.

	2021	**2020**
Adjusted earnings	Rs.	Rs.
Profit for basic EPS	10,60,000	10,00,000
Add: Interest and other charges on earnings saved as a result of the conversion	(2,00,000 + 5,300) = 2,05,300	(1,50,000 +5,000) = 1,55,000
Less: Tax relief on interest portion	(66,000) = 2,00,000 x 33%	(49,500) = 1,50,000 x 33%
Adjusted earnings for equity	11,99,300	11,05,500

Adjusted number of shares

From the conversion terms, it is clear that the maximum number of shares issuable on conversion of Rs. 25,00,000 loan stock after the end of the financial year would be at the rate of 135 shares per Rs. 100 nominal (that is, 33,75,000 shares) = 25,00,000 x 135 / 100.

DEPS calculation	**2021**	**2020**
Number of equity shares for basic EPS	20,00,000	20,00,000
Maximum conversion at date of issue (33,75,000 × 9/12)	-	25,31,250
Maximum conversion after balance sheet date	33,75,000	–
Adjusted shares	53,75,000	45,31,250
Adjusted earnings for equity	11,99,300	11,05,500
Diluted EPS (approx.)	22 paise	24 paise

Q13. (Dec 21)

From the following information you are asked to calculate (a) Basic and Diluted EPS of Duck Ltd and (b) Diluted EPS of Swan Ltd:

	Duck Ltd	**Swan Ltd**
	Amount (Rs)	**Amount (Rs)**
Income from continuing operations	2,52,000	(1,80,000)
Loss from discontinued operations	(4,20,000)	1,45,920
Net loss	(1,68,000)	34,080
Weighted average Number of shares outstanding	80,000	96,000
Incremental common shares outstanding relating to stock options	16,000	25,600

Suggested Solution:

A) For Duck Ltd:

Step 1:

Basic EPS = Profit for the year / Weighted average Number of shares outstanding Basic EPS (Continued Operations) = Profit from continued operations / Weighted average

Number of shares outstanding

= Rs 2,52,000 / 80,000 = Rs 3.15

Basic Loss per share (Discontinued operations) = Loss from discontinued operations / Weighted average Number of shares outstanding

= Rs (4,20,000) / 80,000 = (Rs 5.25)

Overall Basic Loss per share = (Rs 1,68,000) / 80,000 = Rs (2.10) (i)

Step 2: Calculation of Diluted EPS

Diluted EPS =Profit for the year / Adjusted Weighted average Number of shares outstanding EPS (Continued Operations) = Profit from continued operations / Adjusted Weighted average Number of shares outstanding

= Rs 2,52,000 / 96,000 = Rs 2.625

Loss per share (Discontinued operations) = Loss from discontinued operations / Adjusted weighted average number of shares outstanding

= Rs (4,20,000) / 96,000 = (Rs 4.375)

Overall Diluted Loss per share = Rs 1,68,000 / 96,000 = Rs (1.75) (ii)

Reporting Status:

The income from continuing operations is the control number, there is a dilution in basic EPS for income from continuing operations (reduction of EPS from Rs 3.15 to Rs 2.625). Therefore, even though there is an anti-dilution [Loss per share reduced from Rs 2.10 (i) to Rs 1.75 (ii) above], diluted loss per share of Rs 1.75 is reported.

B) For Swan Ltd:

Treatment of potential shares:

In case of loss from continuing operations, the potential shares are excluded since including those shares would result into anti-dilution effect on the control number (loss from continuing operations).

Step 1:

Basic EPS = Profit for the year / Weighted average Number of shares outstanding Basic EPS (Continued Operations) = Profit from continued operations / Weighted average

Number of shares outstanding

= Rs (1,80,000) / 96,000 = Rs (1.875)

Basic Loss per share (Discontinued operations) = Loss from discontinued operations / Weighted average Number of shares outstanding

= Rs 1,45,920 / 96,000 = Rs 1.52

Overall Basic Profit per share = Rs 34,080 / 96,000 = Rs 0.355 (i)

Step 2: Calculation of Diluted EPS

Diluted EPS =Profit for the year / Adjusted Weighted average Number of shares outstanding EPS (Continued Operations) = Profit from continued operations / Adjusted Weighted average Number of shares outstanding

= Rs (1,80,000) / 1,21,600 = Rs (1.48)

Loss per share (Discontinued operations) = Loss from discontinued operations / Adjusted weighted average number of shares outstanding

= Rs 1,45,920 / 1,21,600 = Rs 1.20

Overall Diluted Loss per share = Rs 34,080 / 1,21,600 = Rs 0.28 (ii)

Reporting Status:

The dilutive effect of the potential common shares on EPS for income from discontinued operations and net income would not be reported because of the loss from continuing operations.