

# CHAPTER 29

## EARNINGS PER SHARE (IND AS 33)

### QUESTIONS FROM ICAI STUDY MATERIAL

**Q1:** An entity has following preference shares in issue at the end of 20X4:

- **5% redeemable, non-cumulative preference shares:** These shares are classified as liabilities. During the year, a dividend was paid on the 5% preference shares – ₹ 100,000.
- **Increasing-rate, cumulative, non-redeemable preference shares issued at a discount in 20X0, with a cumulative dividend rate from 20X5 of 10%:** The shares were issued at a discount to compensate the holders, because dividend payments will not commence until 20X5. The accrual for the discount in the current year, calculated using the effective interest method amounted to, say, ₹ 18,000. These shares are classified as equity – ₹ 200,000.
- **8% non-redeemable, non-cumulative preference shares:** At the beginning of the year, the entity had ₹ 100,000 8% preference shares outstanding but, at 30 June 20X4, it repurchased ₹ 50,000 of these at a discount of ₹ 1,000 – ₹ 50,000.
- **7% cumulative, convertible preference shares (converted in the year):** These shares were classified as equity, until their conversion into ordinary shares at the beginning of the year. No dividend was accrued in respect of the year, although the previous year's dividend was paid immediately prior to conversion. To induce conversion, the terms of conversion of the 7% convertible preference shares were also amended, and the revised terms entitled the preference shareholders to an additional 100 ordinary shares on conversion with a fair value of ₹ 300 – Nil.

The profit attributable to ordinary equity holders for the year 20X4 is ₹ 150,000.

Determine the adjustments for the purpose of calculating EPS.

**Note:** It may be noted that as per Sections 53 and 55 of the Companies Act, 2013, a company cannot issue shares at discount or any irredeemable preference shares. However, the above illustration has been given only to explain the concept given in Ind AS.

**Ans:** Adjustments for the purpose of calculating EPS are made as follows:

Particulars	Amount (₹)	Amount (₹)
Profit for the year attributable to the ordinary equity holders		150,000
Amortisation of discount on issue of increasing-rate preference shares (Refer Note 1)	(18,000)	
Discount on repurchase of 8% preference shares (Refer Note 2)	1,000	
Premium to induce Conversion	(30,000)	(47,000)
Profit attributable to ordinary equity holders for basic EPS (Refer Note 3-5)		1,03,000

**Notes:**

1. The original discount on issue of the increasing-rate preference shares is treated as amortised to retained earnings, and treated as preference dividends for EPS purposes and adjusted against profit attributable to the ordinary equity holders. There is no adjustment in respect of dividend, because these do not commence until 20X5. Instead, the finance cost is represented by the amortisation of the discount in the dividend-free period. In future years, the accrual for the dividend of ₹ 20,000 will be deducted from profits.
2. The discount on repurchase of the 8% preference shares has been credited to equity so should be added to profit.
3. The dividend on the 5% preference shares has been charged to the income statement, because the preference shares are treated as liabilities, so no adjustment is required for it from the profit.
4. No accrual for the dividend on the 8% preference shares is required, because they are non-cumulative. If a dividend had been declared for the year, it would have been deducted from profit for the purpose of calculating basic EPS, because the shares are treated as equity and the dividend would have been charged to equity in the financial statements.
5. The 7% preference shares are convertible and hence correctly classified as equity. Accordingly, the additional amount paid (100 additional shares x fair value ₹ 300 per share = ₹ 30,000) to induce conversion would be taken to Equity Share Capital and Retained Earnings or Securities Premium, as the case may be (transaction with 'owners'). Therefore, this excess amount paid would require to be deducted from the Net Profit to arrive at Net Profit attributable to Equity Shareholders

**Q2:** ABC Ltd. issues 9% preference shares of fair value of 10 each on 1.4.20X1. Total value of the issue is 10,00,000. The shares are issued for a period of 5 years and would be redeemed at the end of 5th year. The shares are to be redeemed at 11 each.

At the end of the year 3, i.e. on 31.3.20X4, company finds that it has earned good returns than expected over last three years and can make the redemption of preference shares early. To compensate the shareholders for two years of dividend which they need to forego, company decided to redeem the shares at 12 each instead of original agreement of 11. Comment on the impact of early conversion of preference shares at a premium on earnings for the year 20X3-20X4 attributable to ordinary equity holders of ABC Ltd. for basic EPS.

Ignore the applicability of the standards on Financial Instruments (i.e., ignore EIR; further, the additional payment to be made can be met from Securities Premium/Reserves as Premium on Redemption) and answer on the basis of Ind AS 33 only.

**Ans:** In the given situation, ₹ 1 per share is the excess payment made by the company amounting to ₹ 1,00,000 in all. The amount of ₹ 1,00,000 will be deducted from the earnings of the year 20X3-20X4 while calculating the basic EPS of year 20X3-20X4.

**Q3:** Following is the data for company XYZ in respect of number of equity shares during the financial year 20X1-20X2. Find out the number of shares for the purpose of calculation of basic EPS as per Ind AS 33

S. No.	Date	Particulars	No of shares
1	1-Apr-20X1	Opening balance of outstanding equity shares	100,000
2	15-Jun-20X1	Issue of equity shares	75,000
3	8-Nov-20X1	Conversion of convertible pref shares in Equity	50,000
4	22-Feb-20X2	Buy back of shares	(20,000)
5	31-Mar-20X2	Closing balance of outstanding equity shares	205,000

[MTP Nov 22; May 25]

**Ans:** The closing balance of the outstanding shares is 2,05,000 by a normal addition and subtraction. But as per weighted average concept, one need to find out for how many days each type of shares was actually held during the year.

The shares which were there on 1st April 20X1, were held for the whole year. Therefore, weighted average number of such shares will be given by the formula:

No of shares x no of days the shares were held during the year / 365

$$= 1,00,000 \times 365 / 365 = 1,00,000$$

But the shares which were issued on 15th June 20X1, were held for only 290 days. Therefore, the weighted average number of shares will be  $75,000 \times 290 / 365 = 59,589$ .

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

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

**Q4:** An entity issues 100,000 ordinary shares of Re 1 each for a consideration of ₹ 2.50 per share. Cash of ₹ 1.75 per share was received by the balance sheet date. The partly paid shares are entitled to participate in dividends for the period in proportion to the amount paid. Calculate number of shares for calculation of Basic EPS.

**Ans:** The number of ordinary share equivalents that would be included in the basic EPS calculation on a weighted basis is as follows:  $(100,000 \times ₹ 1.75) / ₹ 2.50 = 70,000$  shares.

**Q5:** On 31 March, 20X2, the issued share capital of a company consisted of ₹ 100,000,000 in ordinary shares of ₹ 25 each and ₹ 500,000 in 10% cumulative preference shares of Re 1 each. On 1 October, 20X2, the company issued 1,000,000 ordinary shares fully paid by way of capitalization of reserves in the proportion 1:4 for the year ended 31 March, 20X3.

Profit for 20X1-20X2 and 20X2-20X3 is ₹ 450,000 and ₹ 550,000 respectively.

Calculate the basic EPS for 20X1-20X2 and 20X2-20X3.

Ans:	20X2-20X3	20X1-20X2
<b>Calculation of earnings</b>	<b>₹'000</b>	<b>₹'000</b>
Profit for the year	550	450
Less: Preference shares dividend	(50)	(50)
Earnings (A)	500	400
<b>Number of ordinary shares</b>	<b>in '000</b>	<b>in '000</b>
Shares in issue for full year	4,000	4,000
Capitalization issue at 1 October 20X2	1,000	1,000
Number of shares (B)	5,000	5,000
Earnings per ordinary share (A/B)	10 Paise	8 Paise*

\*The comparative EPS for 20X1-20X2 can alternatively be calculated by adjusting the previously disclosed EPS in 20X1-20X2 (in this example, 10 Paise) by the following factor:

Number of shares before the bonus issue/ Number of shares after the bonus issue

\*Adjusted EPS for 20X1-20X2 10 Paise x  $(4,000 / 5,000) = 8$  Paise

**Q6:** X Ltd.

1 January	1,000,000 shares in issue
28 February	Issued 200,000 shares at fair value
31 August	Bonus issue 1 share for 3 shares held
30 November	Issued 250,000 shares at fair value

Calculate the number of shares which would be used in the basic EPS calculation. Consider reporting date as December end.

**Ans:**

Period	Calculations	Weighted average number of shares
1 January - 28 February	$1,000,000 \times 2 / 12 \times 4 / 3$	222,222
1 March - 31 August	$1,200,000 \times 6 / 12 \times 4 / 3$	800,000

1 September - 30 November	$1,600,000 \times 3 / 12$	400,000
1 December - 31 December	$1,850,000 \times 1 / 12$	154,167
		1,576,389

**Q7:** Calculate Basic EPS for period ending 20X0, 20X1 and 20X2, when Profit attributable to ordinary equity holders of the parent entity

20X0	1,100
20X1	1,500
20X2	1,800
Shares outstanding before rights issue	500 shares
Rights issue	One new share for each five outstanding shares
Exercise price	5.00
Date of rights issue	1 January 20X1
Last date to exercise rights	1 March 20X1
Market price of one ordinary share immediately before exercise on 1st March 20X1:	11.00
Reporting date	31 December

**Ans:**

20X0 Basic EPS as originally reported:	2.20
20X0 Basic EPS restated for rights:	2.00
20X1 Basic EPS including effects of rights issue:	2.54
20X2 Basic EPS:	3.00

**Q8:** Entity A has in issue 25,000 4% debentures with a nominal value of Re 1. The debentures are convertible to ordinary shares at a rate of 1:1 at any time until 20X9. The entity's management receives a bonus based on 1% of profit before tax.

Entity A's results for 20X2 showed a profit before tax of ₹ 80,000 and a profit after tax of ₹ 64,000 (for simplicity, a tax rate of 20% is assumed in this example).

Calculate Earnings for the purpose of diluted EPS.

**Ans:** For the purpose of calculating diluted EPS, the earnings should be adjusted for the reduction in the interest charge that would occur if the debentures were converted, and for the increase in the management bonus payment that would arise from the increased profit.

	Amount (₹)
Profit after tax	64,000
Add: Reduction in interest cost (25,000 × 4%) (Refer Note)	1,000
Less: Tax expense (1,000 × 20%)	(200)
Less: Increase in management bonus (1,000 × 1%)	(10)
Add: Tax benefit (10 × 20%)	2
Earnings for the purpose of diluted EPS	64,792

**Note:** For simplicity, this illustration does not classify the components of the convertible debenture as liabilities and equity, as required by Ind AS 32.

**Q9:** ABC Ltd. has 1,000,000 ₹ 1 ordinary shares and 1,000 ₹ 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 ₹ 4.50 per share and earnings for the period are ₹ 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. Ignore the requirements of Financial Instruments (Ind AS 109) for the purpose of this question

**Ans:** Basic EPS is ₹ 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 - tax deduction @ 21%

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

#### Incremental shares calculation

Assume all bonds are converted to shares, even though this converts ₹ 100 worth of bonds into 20 shares worth only ₹ 90 and is therefore not economically rational. This gives 1000 x 20 = 20,000 additional shares.

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

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

**Q10:** At 30 June 20X1, the issued share capital of an entity consisted of 1,500,000 ordinary shares of ₹ 1 each. On 1 October 20X1, the entity issued ₹ 1,250,000 of 8% convertible loan stock for cash at par. Each ₹ 100 nominal of the loan stock may be converted, at any time during the years ended 20X6 to 20X9, into the number of ordinary shares set out below:

30 June 20X6: 135 ordinary shares;

30 June 20X7: 130 ordinary shares;

30 June 20X8: 125 ordinary shares; and

30 June 20X9: 120 ordinary shares.

If the loan stocks are not converted by 20X9, they would be redeemed at par.

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 in 20X2 and 20X3 amounted to losses of ₹ 2,500 and ₹ 2,650 respectively. 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 30 June 20X2 and 20X3 amounted to ₹ 825,000 and ₹ 895,000 respectively and relate wholly to continuing operations. The rate of tax for both periods is 33%.

Calculate Basic and Diluted EPS.

[Exam JULY 2021 (8 Marks); MTP May 2023]

**Ans:** Calculation of Basic EPS

		20X3	20X2
	Trading results	₹	₹
A.	Profit before interest, fair value movements and tax	895,000	825,000
B.	Interest on 8% convertible loan stock		

	(20X2: $9/12 \times ₹100,000$ )	(100,000)	(75,000)
C.	Change in fair value of embedded option	(2,650)	(2,500)
	Profit before tax	792,350	747,500
	Taxation @ 33% on (A-B)	(262,350)	(247,500)
	Profit after tax	530,000	500,000
	Calculation of basic EPS		
	Number of equity shares outstanding	1,500,000	1,500,000
	Earnings	₹ 530,000	₹ 500,000
	Basic EPS	35 paise	33 paise

Calculation of diluted EPS

#### Test whether convertibles are dilutive:

The saving in after-tax earnings, resulting from the conversion of ₹ 100 nominal of loan stock, amounts to  $₹ 100 \times 8\% \times 67\% + ₹ 2,650/12,500 = ₹ 5.36 + ₹ 0.21 = ₹ 5.57$ .

There will then be 135 extra shares in issue.

Therefore, the incremental EPS is 4 paise (ie.  $₹ 5.57/135$ ). 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 35 paise. Hence the convertibles are dilutive.

Adjusted earnings	20X3	20X2
	₹	₹
Profit for basic EPS	530,000	500,000
Add: Interest and other charges on earnings saved as a result of the conversion	102,650	77,500
(100,000 + 2,650) (75000+ 2500)		
Less: Tax relief thereon	(33,000)	(24,750)
Adjusted earnings for equity	599,650	552,750

#### Adjusted number of shares

From the conversion terms, it is clear that the maximum number of shares issuable on conversion of ₹ 1,250,000 loan stock after the end of the financial year would be at the rate of 135 shares per ₹ 100 nominal (that is, 1,687,500 shares).

	20X3	20X2
Number of equity shares for basic EPS	1,500,000	1,500,000
Maximum conversion at date of issue $1,687,500 \times 9/12$	–	1,265,625
Maximum conversion after balance sheet date	1,687,500	–
Adjusted capital	3,187,500	2,765,625
Adjusted earnings for equity	₹ 599,650	₹ 552,750
Diluted EPS (approx.)	19 paise	20 paise

Note: Since Effective Interest Rate is not given, splitting of the convertible loan into liability and equity components as envisaged under Ind AS 109 cannot be done. However, since fair values of derivatives are given, the same is considered for accounting at FVTPL.

**Q11:** At 31 December 20X7 and 20X8, the issued share capital of an entity consisted of 4,000,000 ordinary shares of ₹ 25 each. The entity has granted options that give holders the right to

subscribe for ordinary shares between 20Y6 and 20Y9 at ₹ 70 per share. Options outstanding at 31 December 20X7 and 20X8 were 630,000. There were no grants, exercises or lapses of options during the year. The profit after tax, attributable to ordinary equity holders for the years ended 31 December 20X7 and 20X8, amounted to ₹ 500,000 and ₹ 600,000 respectively (wholly relating to continuing operations).

Average market price of share:

Year ended 31 December 20X7 = ₹ 120

Year ended 31 December 20X8 = ₹ 160

Calculate basic and diluted EPS.

**Ans:** Calculation of basic EPS

	20X8	20X7
Profit after tax	₹ 600,000	₹ 500,000
Number of shares	4,000,000	4,000,000
Basic EPS (approx.)	15 paise	13 paise.
Calculation of diluted EPS		
Adjusted number of shares		
Number of shares under option:		
Issued at full market price:		
$(630,000 \times 70) \div 160$	275,625	
$(630,000 \times 70) \div 120$		367,500
Issued at nil consideration — dilutive	354,375	262,500
Total number of shares under option	630,000	630,000
Number of equity shares for basic EPS	4,000,000	4,000,000
Number of dilutive shares under option	354,375	262,500
Adjusted number of shares (A)	4,354,375	4,262,500
Profit after tax (B)	₹ 600,000	₹ 500,000
Diluted EPS (B/A)	14 paise	12 paise

**Note:** If options had been granted or exercised during the period, the number of 'nil consideration' shares in respect of these options would be included in the diluted EPS calculation on a weighted average basis for the period prior to exercise.

**Q12:** Ordinary shares outstanding during 2001 10,00,000

An agreement related to a recent business combination provides for the issue of additional ordinary shares based on the following conditions:

- 5,000 additional ordinary shares for each new retail site opened during 2001
- 1,000 additional ordinary shares for each ₹ 1,000 of consolidated profit in excess of ₹ 20,00,000 for the year ended 31 December 2001

Retail sites opened during the year:

- one on 1 May 2001
- one on 1 September 2001

Consolidated year-to-date profit attributable to ordinary equity holders of the parent entity:

- ₹ 11,00,000 as of 31 March 2001
- ₹ 23,00,000 as of 30 June 2001
- ₹ 19,00,000 as of 30 September 2001 (including a ₹ 4,50,000 loss from a discontinued operation)
- ₹ 29,00,000 as of 31 December 2001

Calculate basic and diluted EPS

Ans: **Basic earnings per share**

Basic earnings per share					
	First quarter	Second quarter	Third quarter	Fourth quarter	Full year
Numerator (₹)	1,100,000	1,200,000	(400,000)	1,000,000	2,900,000
Denominator:					
Ordinary shares outstanding	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Retail site contingency	–	3,333 <sup>6</sup>	6,667 <sup>7</sup>	10,000	5,000 <sup>8</sup>
Earnings contingency <sup>9</sup>	–	–	–	–	–
Total shares	1,000,000	1,003,333	1,006,667	1,010,000	1,005,000
Basic earnings per share (₹)	1.10	1.20	(0.40)	0.99	2.89

6 5,000 shares × 2/3

7 5,000 shares + (5,000 shares × 1/3)

8 (5,000 shares × 8/12) + (5,000 shares × 4/12)

9 The earnings contingency has no effect on basic earnings per share because it is not certain that the condition is satisfied until the end of the contingency period. The effect is negligible for the fourth- quarter and full-year calculations because it is not certain that the condition is met until the last day of the period.

Diluted earnings per share					
	First quarter	Second quarter	Third quarter	Fourth quarter	Full year
Numerator (₹)	1,100,000	1,200,000	(400,000)	1,000,000	2,900,000
Denominator:					
Ordinary shares outstanding	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Retail site contingency	–	5,000	10,000	10,000	10,000
Earnings contingency	– <sup>10</sup>	300,000 <sup>11</sup>	– <sup>12</sup>	900,000 <sup>13</sup>	900,000
Total shares	1,000,000	1,305,000	1,010,000	1,910,000	1,910,000
Diluted earnings per share (₹)	1.10	0.92	(0.40) <sup>14</sup>	0.52	1.52

- 10 Company A does not have year-to-date profit exceeding ₹ 2,000,000 at 31 March 20X1. The Standard does not permit projecting future earnings levels and including the related contingent shares.
- 11  $[(₹ 2,300,000 - ₹ 2,000,000) \div 1,000] \times 1,000 \text{ shares} = 300,000 \text{ shares.}$
- 12 Year-to-date profit is less than ₹ 2,000,000.
- 13  $[(₹ 2,900,000 - ₹ 2,000,000) \div 1,000] \times 1,000 \text{ shares} = 900,000 \text{ shares.}$
- 14 Because the loss during the third quarter is attributable to a loss from a discontinued operation, the antidilution rules do not apply. The control number (ie profit or loss from, continuing operations attributable to the equity holders of the parent entity) is positive. Accordingly, the effect of potential ordinary shares is included in the calculation of diluted earnings per share.

**Q13:** Assume the following facts for Company XY:

Income from continuing operations:	INR 30,00,000
Loss from discontinued operations:	(INR 36,00,000)
Net loss:	(INR 6,00,000)
Weighted average Number of shares outstanding	10,00,000
Incremental common shares outstanding relating to stock options	2,00,000

- a) You are required to calculate the basic and diluted EPS for Company XY from the above information.
- b) Assume, if in above case, Loss from continued operations is ₹ 10,00,000 and income from discontinued operations is ₹ 36,00,000 calculate the diluted EPS.

[Dec 21 Exam (8 Marks); MTP May 2024]

**Ans:**

(a) **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

$$= ₹ 30,00,000 / 10,00,000 = ₹ 3.00$$

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

$$= ₹ (36,00,000) / 10,00,000 = (₹ 3.60)$$

$$\text{Overall Basic Loss per share} = (₹ 6,00,000) / 10,00,000 = ₹ (0.60) \text{ (i)}$$

**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

$$= ₹ 30,00,000 / 12,00,000 = ₹ 2.50$$

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

$$= ₹ (36,00,000) / 12,00,000 = (₹ 3.00)$$

$$\text{Overall Diluted Loss per share} = ₹ 6,00,000 / 12,00,000 = ₹ (0.50) \text{ (ii)}$$

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 ₹ 3.00 to ₹ 2.50). Therefore, even though there is an anti-dilution [Loss per share reduced from ₹ 0.60 (i) to ₹ 0.50 (ii) above], diluted loss per share of ₹ 0.50 is reported.

- (b) 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). Therefore, the diluted EPS will be calculated as under:

Diluted EPS = Profit for the year / Adjusted weighted average number of shares outstanding

Overall Profit = Loss from continuing operations + Gain from discontinued operations

$$= ₹ (10,00,000) + ₹ 36,00,000$$

$$= ₹ 26,00,000$$

Weighted average number of shares outstanding = 10,00,000 Diluted EPS = ₹ 2.60

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.

**Q14:** 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 ₹ 1,000 per bond, giving total proceeds of ₹ 20,00,000. 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 ₹ 3. Income tax is ignored. Entity has accounted for the convertible instrument using the principles of Financial Instruments.

Interest @ 9% for the year has already been adjusted in the profit attributable to shareholders.

Profit attributable to ordinary equity holders of the parent entity Year 1	₹ 10,00,000
Ordinary shares outstanding	12,00,000
Convertible bonds outstanding	2,000
Calculate basic and diluted EPS.	<b>[MTP May 2025]</b>

**Ans:** Allocation of proceeds of the bond issue:

Liability component

₹ 303,755\*

Equity component	₹1,696,245
	₹ 20,00,000

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.

\*This represents the present value of the interest discounted at 9% – 120,000 payable annually in arrears for three years. 2,000,000 assumed to be settled in equity since option is with the entity will not form part of liability.

#### Basic earnings per share Year 1:

₹ 10,00,000 / 1,200,000 = ₹ 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 as under.

$[\text{₹ } 1,000,000 + \text{Rs } 27,338^1] / [1,200,000 + 500,000^2] = ₹ 0.60 \text{ per ordinary share}$

Note:

- Profit is adjusted for the accretion of 27,338 (3,03,755 x 9%) of the liability because of the passage of time.
- 500,000 ordinary shares = 250 ordinary shares × 2,000 convertible bonds

**Q15:** An entity has two classes of shares in issue:

- 5,000 non-convertible preference shares
- 10,000 ordinary shares

The preference shares are entitled to a fixed dividend of ₹ 5 per share before any dividends are paid on the ordinary shares. Ordinary dividends are then paid in which the preference shareholders do not participate. Each preference share then participates in any additional ordinary dividend above ₹ 2 at a rate of 50% of any additional dividend payable on an ordinary share.

The entity's profit for the year is ₹ 100,000, and dividends of ₹ 2 per share are declared on the ordinary shares.

Compute the allocation of earnings for the purpose of calculation of Basic EPS when an entity has ordinary shares & participating equity instruments that are not convertible into ordinary shares.

**Ans:** The calculation of basic EPS is as follows:

₹	₹	
Profit		100,000
Less Dividends payable for the period:		
Preference (5,000 × ₹ 5)	25,000	

Ordinary (10,000 × ₹ 2)	20,000	(45,000)
Undistributed earnings		55,000
Allocation of undistributed earnings:		

Allocation per ordinary share = A

Allocation per preference share = B where B = 50% of A

$(A \times 10,000) + (50\% \times A \times 5,000) = ₹ 55,000$

$A = 55,000 / (10,000 + 2,500) = ₹ 4.4$

B = 50% of A

B = ₹ 2.2

Dividend per share are:	Preference shares	Ordinary shares
	₹ per share	₹ per share
Distributed earnings	5.00	2.00
Undistributed earnings	2.20	4.40
Totals	7.20	6.40

Proof:  $(5,000 \times ₹ 7.2) + (10,000 \times ₹ 6.4) = ₹ 100,000$

**Q16:** 1 January Shares in issue 1,000,000  
 5% Convertible bonds ₹ 100,000  
 (terms of conversion 120 ordinary shares for ₹ 100)  
 31 March Holders of ₹ 25,000 bonds converted to ordinary shares.  
 Profit for the year ended 31 December ₹ 200,000  
 Tax rate 30%.  
 Calculate basic and diluted EPS. Ignore the need to split the convertible bonds into liability and equity elements. **[MTP Nov 2023]**

Ans:

	Number of shares	Profit ₹
Profit		200,000
Outstanding shares	1,000,000	
New shares on conversion (weighted average)		
$9/12 \times ₹ 25,000 / 100 \times 120$	22,500	-
Figures for basic EPS	1,022,500	200,000
Basic EPS is $(₹ 200,000 / 1,022,500) = 0.196$ per share		
Dilution adjustments		
Unconverted shares $₹ 75,000 / 100 \times 120$	90,000	
Interest: $₹ 75,000 \times 5\% \times 0.7$		2,625

Converted shares pre conversion adjustment		
$3/12 \times ₹ 25,000 / 100 \times 120$	7,500	
Interest: $[3/12 \times ₹ 25,000 \times 5\% \times 0.7]$		219
	1,120,000	202,844

Diluted EPS is  $(₹ 202,844 / 1,120,000) = 0.181$

**Q17:** Calculate Subsidiary's and Group's Basic EPS and Diluted EPS, when:

<b>Parent</b>	
Profit attributable to ordinary equity holders of the parent entity	₹ 12,000 (excluding any earnings of, or dividends paid by, the subsidiary)
Ordinary shares outstanding	10,000
<b>Instruments of subsidiary owned by the parent</b>	
	800 ordinary shares
	30 warrants exercisable to purchase ordinary shares of subsidiary
	300 convertible preference shares
<b>Subsidiary:</b>	
Profit	₹ 5,400
Ordinary shares outstanding	1,000
Warrants	150, exercisable to purchase ordinary shares of the subsidiary
Exercise price	₹ 10
Average market price of one ordinary share	₹ 20
Convertible preference shares	400, each convertible into one ordinary share
Dividends on preference shares	Re 1 per share
No inter-company 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.	

**Ans:** Subsidiary's earnings per share

Basic EPS	₹ 5.00 calculated:	₹ 5,400 (a) – ₹400 (b)
		1,000 (c)
Diluted EPS	₹ 3.66 calculated:	₹ 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 (₹ 5,000) increased by ₹ 400 preference dividends for the purpose of calculating diluted earnings per share.
- (e) Incremental shares from warrants, calculated:  $[(₹ 20 - ₹ 10) \div ₹ 20] \times 150$ .
- (f) Subsidiary's ordinary shares assumed outstanding from conversion of convertible preference shares, calculated: 400 convertible preference shares  $\times$  conversion factor of 1.

### Consolidated earnings per share

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

### Notes:

- (a) Parent's profit attributable to ordinary equity holders of the parent entity.
- (b) Portion of subsidiary's profit to be included in consolidated basic earnings per share, calculated:  $(800 \times ₹ 5.00) + (300 \times ₹ 1.00)$ .
- (c) Parent's ordinary shares outstanding.
- (d) Parent's proportionate interest in subsidiary's earnings attributable to ordinary shares, calculated:  $(800 \div 1,000) \times (1,000 \text{ shares} \times ₹ 3.66 \text{ per share})$ .
- (e) Parent's proportionate interest in subsidiary's earnings attributable to warrants, calculated:  $(30 \div 150) \times (75 \text{ incremental shares} \times ₹ 3.66 \text{ per share})$ .
- (f) Parent's proportionate interest in subsidiary's earnings attributable to convertible preference shares, calculated:  $(300 \div 400) \times (400 \text{ shares from conversion} \times ₹ 3.66 \text{ per share})$ .

**Q18:** 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 (₹ 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:

- a) 20,00,00,000 equity shares at the beginning of the year and the company have issued 5,00,00,000 shares on 1st July, 20X2 at full market value.

- b) 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.
- c) ₹ 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 ₹1 payable in four years is 0.74 and the cumulative present value of ₹ 1 payable at the end of years one to four is 3.31.
- d) 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:

- a) The finance cost of convertible debentures and its closing balance as on 31st March, 20X3 to be presented in the consolidated financial statements.
- b) The basic and diluted earnings per share for the year ended 31 st March, 20X3. Assume that income tax is applicable to CAB Limited and its subsidiaries at 25%.

[RTP May 2020; Exam Nov 22 (8 Marks)]

**Ans:** Calculation of the liability and equity components on 6% Convertible debentures:

Present value of principal payable at the end of 4th year ( $₹ 1,80,000 \text{ thousand} \times 0.74$ ) = ₹ 1,33,200 thousand

Present value of interest payable annually for 4 years ( $₹ 1,80,000 \text{ thousand} \times 6\% \times 3.31$ ) = ₹ 35,748 thousand

Total liability component = ₹ 1,68,948 thousand

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

= ₹ 11,052 thousand

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

Year	Opening balance ₹ in '000	Finance cost @ 8% ₹ in '000	Interest paid @ 6% ₹ in '000	Closing balance ₹ 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 ₹ 13,733.11 thousand and closing balance as on 31.3. 20X3 is ₹ 1,74,596.95 thousand.

**Calculation of Basic EPS**

₹ in '000

Profit for the year	39,000
Less: Dividend on preference shares (80,000 thousand x ₹ 0.05)	<u>(4,000)</u>
Profit attributable to equity shareholders	<u>35,000</u>

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 = ₹ 35,000 thousand / 2,37,500 thousand shares = ₹ 0.147

Calculation of Diluted EPS

₹ in '000

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

Weighted average number of shares

$$= 20,00,00,000 + \{5,00,00,000 \times (9/12)\} + 10,00,00,000$$

$$= 33,75,00,000 \text{ shares or } 3,37,500 \text{ thousand shares}$$

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

### QUESTIONS FROM RTP/MTP/EXAMS

**Q19:** P Ltd. is a subsidiary company of ABC Ltd. It preparing both Separate financial statement (SFS) and consolidated financial statements (CFS) for the year ending on 31st March, 20X1. It has net profit after tax of ₹ 20,00,000 as per SFS & ₹ 16,00,000 as per CFS. Share capital of P Ltd. is 2,00,000 shares of ₹ 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 ₹ 16,00,000

Number of equity shares attributable to Parent company ABC Ltd.

(2,00,000 x 80%) 1,60,000 shares

Basic EPS ₹ 10 per share

Examine the correctness of the above presentation of Basic EPS. [RTP May 2018]

**Ans:** As per paragraph 4 of Ind AS 33 "Earnings per Share", when an entity presents both consolidated financial statements and separate financial statements 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 consolidated financial statements and separate financial statements. In consolidated financial statements such disclosures shall be based on consolidated information and in separate financial statements such disclosures shall be based on information given in separate financial statements. An entity shall

not present in consolidated financial statements, earnings per share based on the information given in separate financial statements and shall not present in separate financial statements, earnings per share based on the information given in consolidated financial statements.

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.

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

Therefore. the requirements of paragraph 9 of Ind AS 33 have been provided in the context of calculating EPS in the consolidated financial statements of an entity.

The accountants of P Ltd. had followed this for calculation of Basic EPS in its SFS. As per ITFG Bulletin 11, for SFS analogy may be drawn from paragraph 9 of Ind AS 33 that in case of separate financial statements, the parent entity mentioned in paragraph 9 will imply the legal entity of which separate financial statements are being prepared and accordingly, when an entity presents EPS in its separate financial statements, then the same shall be calculated based on the profit or loss attributable to its equity shareholders.

Hence, 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	₹ 20,00,000
No. of share issued	2,00,000 shares
Basic EPS	₹ 10 per share

**Q20** The following information is available relating to Space India Limited for the Financial Year 2019-2020.

Net profit attributable to equity shareholders ₹ 90,000

Number 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 2019-2020.  
[Exam Nov 2020 (8 Marks); MTP May 22]

Ans. (i) **Basic Earnings per share**

		Year ended 31.3.2020
Net profit attributable to equity shareholders	(A)	₹ 90,000
Number of equity shares outstanding	(B)	16,000
Earnings per share	(A/B)	₹ 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 ₹	No. of equity shares	Net Profit attributable per share ₹	
Net profit attributable to equity shareholders	90,000	16,000	5.625	
Options		<u>150</u>		
	90,000	16,150	5.572	Dilutive
10% Convertible debentures	<u>75,000</u>	40,000		
	1,65,000	56,150	2.939	Dilutive
Convertible Preference Shares	<u>72,900</u>	<u>15,000</u>		
	<u>2,37,900</u>	<u>71,150</u>	3.344	Anti-Dilutive

Since diluted earnings per share is increased when taking the convertible preference shares into account (₹ 2.939 to ₹ 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 ₹ 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
	₹		₹	
<b>Options</b>				
Increase in earnings	Nil			
No. of incremental shares issued for no consideration [900 x (90-75)/90]		150	Nil	1
<b>Convertible Preference Shares</b>				
Increase in net profit attributable to equity shareholders as adjusted by attributable dividend tax [(₹ 9 x 7,500) + 8% (₹ 9 x 7,500)]	72,900			
No. of incremental shares (2 x 7,500)		15,000	4.86	3
<b>10% Convertible Debentures</b>				
Increase in net profit [(₹ 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.

**Q21:** 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 along with the necessary computations for EPS of Year 1.

The following basic facts relate to Company Zio Life Limited.

- Net profit for Year 1 is ₹ 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 ₹ 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 ₹ 1,800.
- The interest expense is tax-deductible. The applicable income tax rate is 40%.

[MTP Nov 2021]

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

Basic EPS	Diluted EPS
<p><b>1. Determine the numerator</b> No adjustment is necessary until the convertible bonds are converted and ordinary shares are issued. The numerator is net profit ie. ₹ 46,00,000.</p>	<p><b>1. Identify Potential Ordinary Shares (POs)</b> The convertible bonds are the only POs.</p>
<p><b>2. Determine the denominator</b> There is no change in the number of outstanding shares during the year. The denominator is therefore 30,00,000.</p>	<p><b>2. For each POS, calculate Earnings per Incremental Share (EPIS):</b> Since Zio Life Limited has the choice of settlement, for the purpose of determining the EPIS, it assumes the share-settlement assumption.</p>
	<p><b>Potential adjustment to the numerator for EPIS:</b> 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) = (₹ 1,800) x (1 - 40%) = ₹ 1,080</p>

	<p><b>Potential adjustment to the denominator for EPIS:</b> The convertible bonds, when settled in ordinary shares, would increase the number of outstanding shares by 2,00,000 (20,00,000 / 10).</p> <p><b>EPIS is calculated as follows:</b>  <math>EPIS = 1,080 / 2,00,000 = 0.01</math></p>
3. <b>Determine basic EPS</b> Basic EPS = $46,00,000 / 30,00,000 = 1.53$	3. <b>Rank the POSs</b> This step does not apply, because the convertible bonds are the only class of POSs.
	4. <b>Identify dilutive POSs and determine diluted EPS</b> The potential impact of convertible bonds is determine as follows. (Refer W.N. below)
	Accordingly, Zio Life Limited includes the impact of the convertible bonds in diluted EPS. Diluted EPS = ₹ 1.44

**Working Note:****Calculation of Diluted EPS**

	Earnings (₹)	Weighted average number of shares	Per Share (₹)	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

**Q22:** Following information pertains to an entity for the year ending 31 st March 20X1:

Net profit for the year	₹ 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	₹ 20
Weighted average number of shares under option during the year	1,00,000 shares
Exercise price per share under option during the year	₹ 15
Calculate basic and diluted earnings per share.	<b>[RTP Nov 2021]</b>

**Ans:** Calculation of earnings per share

	Earnings	Shares	Per share
Profit attributable to equity holders	₹ 12,00,000		
Weighted average shares outstanding during year 20X1		5,00,000	

<b>Basic earnings per share</b>			<b>₹ 2.40</b>
Weighted average number of shares under option		100,000	
Weighted average number of shares that would have been issued at average market price: $(1,00,000 \times ₹ 15.00) \div ₹ 20.00$	<u>Refer Note</u>	<u>(75,000)</u>	
<b>Diluted earnings per share</b>	<b>₹ 1,200,000</b>	<b>525,000</b>	<b>₹ 2.29</b>

**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.

**Q23:** ABC Ltd. 1st January, 20X1 Shares in issue 10,00,000  
31st March, 20X1 (a) Rights issue 1 for 5 at 90 paise  
(b) Fair value of shares ₹ 1 (cum-rights price)

Calculate the number of shares for use in the EPS calculation for the calendar year. [MTP Nov 22]

**Ans:** Rights issue bonus fraction

	Shares	₹ per share	₹
Cum-rights	5	1	5.0
Rights	1	0.9	0.9
Ex-rights	6		5.9
Theoretical ex-rights price	$(5.9 / 6)$	$= 0.983$	
Bonus fraction = Cum-rights price / Theoretical ex-rights price = $1/0.983$			<b>Number of shares</b>
1 January - 31 March $(10,00,000 \times 3/12 \times 1/0.983)$			2,54,323
1 April - 31 December $(12,00,000 \times 9/12)$			9,00,000
Number of shares for the purpose of EPS calculation			11,54,323

**Q24:** GOLD Ltd., a manufacturing company, prepares its financial statements on 31st March every year. On 1st April, 2021, it had issued (a) 10,00,000 ordinary shares and (b) 6% convertible bonds amounting to ₹ 1,00,000, the terms of conversion being 120 ordinary shares for every ₹ 100. On 30th June, 2021, ₹ 50,000 bonds converted to ordinary shares. The profit for the year ended 31st March, 2022 is ₹ 2,50,000. The applicable tax rate is 25%.

Calculate basic and diluted EPS. Ignore the need to split the convertible bonds into liability and equity element. [Exam May 22 (4 Marks)]

**Ans:**

	<b>Number of shares</b>	<b>Profit (₹)</b>
--	-------------------------	-------------------

Profit		2,50,000
Outstanding ordinary shares	10,00,000	
New shares on conversion (weighted average) [(9/12 x ₹ 50,000 / 100 x 120)]	45,000	
Figures for basic EPS	10,45,000	2,50,000
Basic EPS is (₹ 2,50,000 / 10,45,000 shares) = ₹ 0.239 per share		
Dilution adjustments		
Unconverted shares (₹ 50,000 / 100 x 120)	60,000	
Interest (₹ 50,000 x 6% x 0.75 net of tax)		2,250
Converted shares pre conversion adjustment (3/12 x ₹ 50,000 / 100 x 120)	15,000	
Interest: [3/12 x ₹ 50,000 x 6% x 0.75 net of tax]		562.50
	11,20,000	2,52,812.50
Diluted EPS is (₹ 2,52,812.50 / 11,20,000 shares) = ₹ 0.226 per share		

**Q25:** 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 ₹ 40.
- The average market price of Company S's ordinary share was ₹ 50 in 20X1.
- In 20X1, Company S's profit was ₹ 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 ₹ 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. [RTP Nov 2022]**

**Ans:** 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	₹ 30,000
Weighted average ordinary shares	10,000
Incremental shares (refer W.N.)	200

Company S's diluted EPS  $\text{₹ } 30,000 / (10,000 + 200) = \text{₹ } 2.94$

Calculation of Company P's diluted EPS:

Company P's earning for the period  $\text{₹ } 7,000$

Company P's share of Company S's earning attributable to ordinary shares  $\text{₹ } 26,460$

$[(9,000 / 10,000) \times (2.94 \times 10,000)]$

Company P's share of Company S's earning attributable to options  $\text{₹ } 294$

$[(500 / 1,000) \times (2.94 \times 200)]$

Company P's weighted average ordinary shares outstanding  $5,000$

Company P's diluted EPS =  $(7,000 + 26,460 + 294) / 5,000$   $\text{₹ } 6.75$

#### 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 $[(40 \times 1,000)/50]$	(800)
Incremental shares	200

**Q26:** Company P has both ordinary shares and equity-classified preference shares in issue. The reconciliation of the number of shares during Year 1 is set out below: **Number of shares**

Dates in Year 1	Transaction	Ordinary shares	Treasury shares	Preference shares
1 <sup>st</sup> April	Balance	30,00,000	(5,00,000)	5,00,000
15 <sup>th</sup> April	Bonus issue – 5% (no corresponding changes in resources)	1,50,000	(25,000)	-
1 <sup>st</sup> May	Repurchase of shares for cash	-	(2,00,000)	-
1 <sup>st</sup> Nov	Shares issued for cash	4,00,000	-	-
31 <sup>st</sup> Mar	Balance	35,50,000	(7,25,000)	5,00,000

The following additional information is relevant for Year 1.

- Company P's net profit for the year is ₹ 46,00,000.
- On 15<sup>th</sup> February, non-cumulative preference dividends of ₹ 1.20 per share were declared. The dividends were paid on 15<sup>th</sup> March. Preference shares do not participate in additional dividends with ordinary shares.

- Dividends on non-cumulative preference shares are deductible for tax purposes. The applicable income tax rate is 30%.

The financial year of Company P ends on 31st March.

Determine the Basic EPS of the Company P for Year 1. Use the number of months or part of months, rather than the number of days in the calculation of EPS. **[RTP May 2023]**

**Ans: Determination of numerator for calculation of Basic EPS**

The first step in the basic EPS calculation is to determine the profit or loss that is attributable to ordinary shareholders of Company P for the period.

Non-cumulative dividends paid on equity-classified preference shares are not deducted in arriving at net profit or loss for the period, but they are not returns to ordinary shareholders. Accordingly, these dividends are deducted from net profit or loss for the period in arriving at the numerator.

		(₹)
Net profit		46,00,000
Preference dividends (5,00,000 shares x 1.2)	(6,00,000)	
Related tax (₹ 6,00,000 x 30%)	1,80,000	(4,20,000)
Profit or loss attributable to P's ordinary shareholders		41,80,000
Accordingly, the numerator for calculation of Basic EPS is ₹ 41,80,000		

**Determination of denominator for calculation of Basic EPS**

The second step in the basic EPS calculation is to determine the weighted-average number of ordinary shares outstanding for the reporting period.

Number of shares	Time weighting	Weight	Weighted average number of shares
1 <sup>st</sup> April – opening balance (30,00,000 – 5,00,000)	25,00,000	1	
15 <sup>th</sup> April – bonus issue (1,50,000 – 25,000)	1,25,000		
1 <sup>st</sup> April to 30 <sup>th</sup> April	26,25,000	1/12	2,18,750
1 <sup>st</sup> May – repurchase of shares	(2,00,000)		
1 <sup>st</sup> May to 31 <sup>st</sup> October	24,25,000	6/12	12,12,500
1 <sup>st</sup> November – new shares issued	4,00,000		
1 <sup>st</sup> November to 31 <sup>st</sup> March	28,25,000	5/12	11,77,083
<b>Weighted average number of shares for the year</b>			<b>26,08,333</b>

The denominator for calculation of Basic EPS is 26,08,333 shares.

**Basic EPS** = ₹ 41,80,000 / 26,08,333 shares = ₹ 1.60 per share (approx.).

**Q27:** Following information is given to you in respect of A Ltd. and B Ltd.:

Particulars	A Ltd.	B Ltd.
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	Amount (₹)	Amount (₹)
Income (loss) from continuing operations	5,04,000	(3,60,000)
Income (loss) from discontinued operations	(8,40,000)	6,51,840
Net income (loss)	(3,36,000)	2,91,840
Weighted average number of shares outstanding	1,60,000	1,92,000
Incremental common share outstanding relating to stock options	32,000	51,200

From the above information, you are required to calculate the following:

- Basic and Diluted EPS of A Ltd. and
- Diluted EPS of B Ltd.

[Exam May 2025 (6 Marks)]

Ans: (i) **Basic and Diluted EPS of A Ltd.**

**Basic EPS of A Ltd.**

Basic EPS(Continued Operations)	= Profit from continued operations/Weighted average number of shares outstanding
	= ₹ 5,04,000 / 1,60,000 = ₹ 3.15
Basic Loss per share (Discontinued operations)	= Loss from discontinued operations / Weighted average number of shares outstanding
	= (₹ 8,40,000) / 1,60,000 = (₹ 5.25)
Overall Basic Loss per share	= (₹ 3,36,000) / 1,60,000 = (₹ 2.10)

**Diluted EPS of A Ltd.**

Diluted EPS = Profit for the year / Adjusted weighted average number of shares outstanding

DEPS (Continued Operations)	= Profit from continued operations / Adjusted weighted average number of shares outstanding
	= ₹ 5,04,000 / 1,92,000 = ₹ 2.625
Diluted Loss per share (Discontinued operations)	= Loss from discontinued operations/ Adjusted weighted average number of shares outstanding
	= (₹ 8,40,000) / 1,92,000 = (₹ 4.375)
Overall Diluted Loss per share	= (₹ 3,36,000) / 1,92,000 = (₹ 1.75)

- (ii) **In case of B Ltd.'s 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).**

Therefore, the Diluted EPS of B Ltd will be calculated as under:

Diluted EPS	= Profit for the year / Adjusted weighted average number of shares outstanding
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Overall Profit	=	Loss from continuing operations + Gain from discontinued operations
	=	(₹ 3,60,000) + ₹ 6,51,840 = ₹ 2,91,840
Weighted average number of shares outstanding	=	1,92,000
Diluted EPS	=	₹ 1.52

**Q28:** On 31st March, 2024, Vanshika Ltd. granted options to its employees that gave them right to subscribe for equity shares in next 3 years at ₹ 112 per share. It also issued 2 lakhs warrants convertible into shares at ₹ 84.

As on 31st March, 2025:

Options outstanding	1,40,000
Profit after Tax, attributable to equity shareholders	₹ 91,20,000
Average market price of equity shares	₹ 140
Issued Equity share capital (Face value ₹ 10 each)	₹ 50,00,000

There were no grants, exercises or lapses of options during the year. Also, none of the warrants was converted into shares during the year. You are required to calculate Basic and Diluted EPS as at 31st March, 2025. **[Exam Sep 2025 (6 Marks)]**

**Ans:** Calculation of Basic Earnings Per Share (EPS)

	2024-2025
Profit after tax	₹ 91,20,000
Number of shares (₹ 50,00,000 / ₹ 10 per share)	5,00,000
Basic EPS	₹ 18.24

Calculation of Diluted EPS

(i) Adjusted number of shares	
a. Number of shares under options:	
Issued at full market price $[(1,40,000 \times 112) / 140] = 1,12,000$	
Options issued at nil consideration (dilutive) $(1,40,000 - 1,12,000)$	28,000
b. Number of shares under warrants:	
Issued at full market price $[(2,00,000 \times 84) / 140] = 1,20,000$	
Warrants issued at nil consideration (dilutive) $(2,00,000 - 1,20,000)$	<u>80,000</u>
Number of dilutive shares under options and warrants	<u>1,08,000</u>
(ii) Calculation of Diluted EPS:	
Number of equity shares for basic EPS	5,00,000

Number of dilutive shares under options and warrants	<u>1,08,000</u>
Adjusted number of shares (A)	<u>6,08,000</u>
Profit after tax (B)	₹ 91,20,000
Diluted EPS (B/A)	₹ 15

**NOTES**

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