



श्री अरुण शर्मा

श्री अरुण शर्मा:

श्री अरुण शर्मा



IND AS 33

EPS.

#1 Introduction.

i) EPS means profits attributable to each equity share.



- Pure equity instruments.
- It does not include contract to be settled for fixed no. of eq. sh. as per IND AS 109.

ii) EPS is a measure of performance of the Co.

iii) This IND AS requires

a) to calculate EPS

b) to present EPS on face of fis.

→ for both continuing operation



Discontinuing option

→ for both SFS & CFS



iv) There are two types of EPS

a) Basic EPS (BEPS)

b) Diluted EPS (DEPS)

#2 Overview.

Basic
EPS
#3

Diluted
EPS
#4

EPS
for group
(CFS)
#5

#3 Basic EPS

i) Formula ⇒

$$\text{BEPS} = \frac{\text{EAT ESH (Net profit) Earnings available to ESH}}{\text{WANEs. (weighted avg. no. of eq. sh.)}}$$

Notes: - a) Eq. shares does not mean equity as per IND AS 109.

b) EPS can also be -ve.



ii) EATESH

Particulars.

EBIT

Amount.

xxx

Less: Interest.

(xx)

a) includes Div. on redeemable pref. sh.
Using EIR

(EIR% × PSC @ Face value - Dis + prem. - T.C.)

b) Beware of Int. on Com. f. I.

(EIR% × Debt position (if market ROI is given))

PBT

xxx

Less: Tax expense

(xx)

PAT / N.P. / Profit for the yr. ended

xxx

Less: Dividend on cumulative pref. shares.
(always.)

(xx)

(Div.% × PSC @ Face value)

Dividend on Non Cumulative pref. sh.

(xx)

(only if declared.)

Less: Settlement loss on redn

(xxx)



Unplanned premium on Redⁿ (refer egⁿ)

Less/Add \rightarrow Exp / income not recorded in P/L xx/(xx)

EATBⁿ / NPATBⁿ xxx

Notes :-

i) OCI is not considered as a part of EPS

ii) Please do not subtract:

a) Trf. to any reserve

b) Equity dividend.

iii) General Assumption:

\rightarrow Ignore INDA unless M.ROI on such F.I. is given.

Loan/Bonds/Debentures

\downarrow
Treat it as
a Liability

$$\text{Int} = \text{Face Value} \times \text{Coupon rate.}$$

Pref. shares.

\downarrow
Treat it as
S.C.

$$\text{Div} = \text{Face Value} \times \text{Coupon rate}$$



eg 1 → 12% pref. sh. issued at par, redeemable after 5 years, After 3 years Co. decided to settle pref. sh. @



3% premium

↳ unplanned Premium on Redn.

Question # 3

ILL 2 OF SM

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

1. 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.
2. 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.
3. 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.
4. 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 after tax for the year 20X4 is ₹ 150,000.

Determine the adjustments for the purpose of calculating EPS.

Soln: Adjustments

- i) Dividend should be treated as interest and hence would be considered in PAT.



ii) Since P.S. are Non redeemable and cumulative whose C.Y. dis. using EIR = 18000 should be subtracted from PAT



∴ it is equity

iii) Unplanned discount on repurchase of pref. shares of ₹ 1000 should be added.

iv) Unplanned premium on conversion = 100 sh × ₹ 300 = 30000 should be subtracted.

v) Calcⁿ of **EATESH**

PAT.	150000
Dis. on issue using EIR	(18000)
Dis. on repurch.	1000
Premium to induce conversion	(30000)
EATESH.	103000

Question # 5

SIMILAR TO ILL 1 OF SM

Redeemable

X Ltd issues 9% preference share of face value ₹ 10 each at a discount of ₹ 0.5 per share, redeemable after 5 years on 1.04.2017. Total value of the issue is ₹ 10,00,000. At the end of 3 years, company finds that it had earned good returns than expected over last three 3 years and can make redemption of preference easily. To compensate preference shareholders for 2 years dividend which they need to forgo, the company decided to redeem preference share at ₹ 12 per share.

Calculate the amount of dividend to be deducted while calculating EPS as per Ind AS-33 and calculate the amount of settlement loss to be debited in year 3.

Solⁿ: i) ∴ MRO I is not given, ∴ Do not consider

it as F.I.

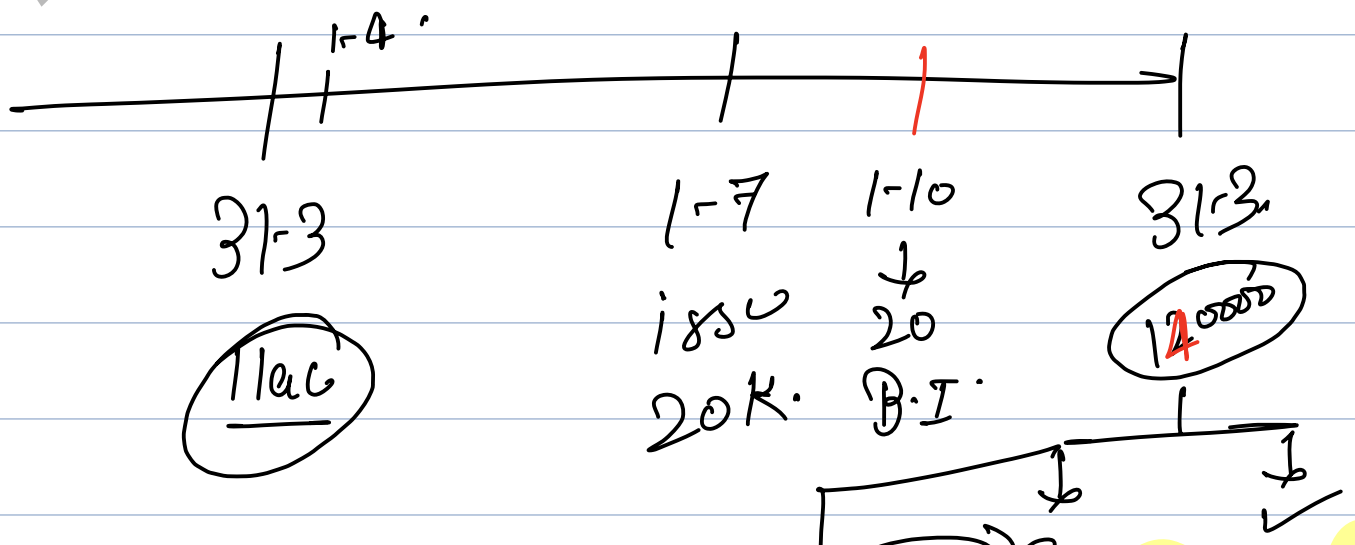


ii) Unplanned premium of 100000 sh (12-11) = ₹ 100000 should be subtracted from PAT.

iii) No amount of Dividend should be deducted while calculating EPS \because it is not paid.

iii) W.A.N.E.S.

- i) it means no. of equity shares as adjusted with time factor.
- ii) Time factor is no. of days or months for which shares were o/s as proportion of Total no. of days/months in a year.





$20k \times \frac{12}{12}$ $12 \times \frac{12}{12}$ $20k \times \frac{9}{12}$
 or 1

HD
MENTORING
HARSHIT DWIVEDI
CA FOUNDATION | CA INTERMEDIATE | CA FINAL

eg-2. yr. end. 31-3-25
 1-4-24 op. bal. (was there for 12m) 10000
 1-7-24 issued 3000 sh. (for 9m) 2250
 $(3000 \times \frac{9}{12})$
 W.A.N.E.S 12250

iii) it is calculated as under

Particulars	workings	W.A.N.E.S.
op. bal. or no. of eq. sh. at the beginning of year		xxx
Add: Fresh issue of Shares for Cash.	no. of eq. sh. issued \times $\frac{\text{Days/m.}}{365/12}$	xxx
Add: partly paid up Shares.	no. of eq. Sh. issued \times $\frac{\text{Paid up Value}}{I.P.} \times P.F.$	xxx

Add. Shares issued
for settlement
of Liability

$$\frac{\text{Value of Liability}}{\text{Iss. Price.}} \times \text{P.F.} \quad \text{xxx}$$

Less Buy back or
Treasury sh.
WANES.

$$\text{no. of. eq. sh.} \times \text{P.F.} \quad (\text{xxx})$$

$$\text{b.b.}$$

xxx

Question # 7

DATE	PARTICULARS	SHARES
01.01.01	Balance at the beginning of the year	2,000
31.05.01	Fresh issue of shares	800
01.12.01	Buy back of shares	250

Calculate WANES

Solⁿ:-

Particulars	workings.	WANES.
Op. Bal.		2000
Fresh issue	$800 \times \frac{7}{12}$	467
Buy back	$250 \times \frac{1}{12}$	(21)
		<u>2446</u>

Question # 8

DATE	PARTICULARS	SHARES
01.04.01	Balance at the beginning of the year	1,00,000
15.06.01	Fresh issue	75,000
03.11.01	Conversion of PS to ES, after conversion	50,000
22.02.01	Buy back	20,000

Calculate WANES

Solⁿ :-

Particulars	workings	WANES
Op. bal.		100000
F.I.	$75000 \times \frac{290}{365}$	50589
Conversion	$50000 \times \frac{199}{365}$	20411
Buy back	$20000 \times \frac{38}{365}$	(2082)
		<u>177918</u>

Question # 9

DATE	PARTICULARS	SHARES
01.01.01	Balance of ES of ₹ 100 each at the beginning of the year	10,000
01.06.01	Fresh issue of ₹ 100 each at ₹ 70 each paid up	10,000 <i>7M</i>
01.07.01	Buy back of fully paid shares	4,000 <i>6M</i>
01.11.01	Issue of fully paid up shares of ₹ 100 each	6,000 <i>2M</i>
Other information		
PBT		₹ 12,00,000
Preference dividend		₹ 5,00,000
Tax rate		30%
DBT		17%

Calculate BEPS

Solⁿ :- (1) calcⁿ of EATESH

PBT 1200000
 - Tax @ 30% (360000)



PAT	84000
- Pref. Dividend	(50000)
EATESH	<u>34000</u>



ii) WAN ES.

Op. Bal		100000
Fresh issue	$(10000 \times \frac{70}{100} \times \frac{7}{12})$	4083
Buyback	$(4000 \times \frac{6}{12})$	(2000)
Fresh issue	$(6000 \times \frac{2}{12})$	1000
		<u>13083</u>

iii) BEPS = $\frac{34000}{13083} = 25.99$

Question # 10

During the year 31.03.2017, X Ltd made a public issue of 1,00,000 ES of ₹ 10 each. The issue was subscribed and calls were made as under

- ₹ 5 on share application and share allotment on 1.7.2016 5m.
- ₹ 2 on share first call on 30.09.2016 6m
- ₹ 3 on share second call on 01.01.2017 3m.

The company had 5,00,000 shares outstanding on 01.04.2016. Net Profit for 2016-17 is ₹ 11,00,000

Calculate BEPS

Solⁿ i) EATESH = 11,00,000

ii) WANES.

Op. bal.		500000
Application & All.	$(1L \times \frac{5}{12} \times \frac{5}{10})$	87500
Share 1st call	$(1L \times \frac{2}{10} \times \frac{6}{12})$	10000

Share 2nd Call $(1L \times \frac{3}{10} \times \frac{3}{12})$

7500

555000



iii) EPS:

$$EPS = \frac{1100000}{555000} \times 100 = 1.98$$

Question # 11

DATE	PARTICULARS	SHARES	NV = <u>Face Value</u>	AMOUNT PAID
01.01.2018	Opening balance	1,800	10	18000
01.04.2018	Fresh issue	600	5	3000

PAT is ₹ 2,10,000

Calculate BEPS

Solⁿ: (i) E.A.T.E.S.H = 210000

(ii) W.A.N.E.S

Op. balance	=		1800
Fresh issue	=	$600 \times \frac{5}{10} \times \frac{12}{12}$	<u>225</u>
			<u>2025</u>

iii) B. EPS (₹) = $\frac{210000}{2025} = 103.7$

BEPS (₹) $\Rightarrow \frac{103.7}{10} \times 5 = 51.85$

Question # 12

X Ltd has 50,000 ES on 1.04.2017 of face value ₹ 10. The company had a liability to pay ₹ 2,00,000 to Mr. P from FY 2016-17. As per understanding between the parties on 30.6.2017. X Ltd settled the liability by issue of ES at ₹ 25 per share. Net profit after tax for FY 2017-18 is ₹ 4,00,000. ✓

Calculate BEPS

Solⁿ :- (i) E.A.T.E.S.H = 400000



(ii) W.A.N.E.S

Particulars	workings	W.A.N.E.S.
Op. bal.		50000
E. sh. issue to settle liability	$\frac{\text{₹ } 200000}{\text{₹ } 2} \times \frac{9}{12}$	<u>6000</u>
		<u>56000</u>

iii) B.E.P.S

$$\Rightarrow \frac{400000}{56000} = 7.14$$

Question # 41

ILL 17 ICAI SM

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.

Solⁿ :- no. of eq. shares = $100000 \times \frac{1.75}{2.5} = 70000$

iv) Calculation of W.A.N.E.S in various special cases :-

BONUS SHARES

a) Bonus issue :-

Bonus shares are issued to existing sh. w/o any consideration (they do not bring any resources) by capitalization of Reserves



1-4-21

G.M.

~~BEP~~
31-3-22

1-5
Bonus
1:1

31-3-23

~~BEP~~
BEPs. C.Y.



10000
↓
10 Lac.
Eqv.

~~10 Lac.~~

10 Lac.
20 Lac.

P.Y.
(Restated)

20 Lac.

therefore

multiply

no. of eq. sh. before Bonus issue.

with

Bonus Adjustment factor
(BAF)

∴

entity will get no of eq. sh.
after Bonus.

P.Y. EPS is to
be Restated.

↓

Restated BEPs
of P.Y.

⇓

EATESH
WANES of P.Y. x BAF



• BAF = 1 + Bonus Ratio.

if Bonus Ratio is 1:4

∴ BAF = 1 + $\frac{1}{4}$ → gain.

$$= \frac{5}{4}$$

Hence 5000 shares before Bonus.

$$\text{Bonus} = 5000 \times \frac{5}{4}$$

⇒ 6250 After Bonus.

eg-3 → 1-1-24 10000 Bonus Ratio = 1:4
1-4-24 3000 On 1-6-24.

$$\text{BAF} = 1 + \frac{1}{4} = \frac{5}{4}$$

IND AS 33

AS 20

$$10000 \times \frac{5}{4} \times \frac{12}{12} = 12500$$

$$3000 \times \frac{5}{4} \times \frac{12}{12} = 28125$$

$$\underline{40625}$$

$$10000 \times \frac{12}{12} = 10000$$

$$3000 \times \frac{12}{12} = 22500$$

$$10000 \times \frac{12}{12} = \frac{10000}{42500}$$

chemical.

$$40000 \times \frac{5}{4}$$

FR WIDHD (8871296220)



more logical

if u see logically: 22500
- 10000

$$\text{Bonus } 10000 \times \frac{1}{4} \times \frac{12}{12} = 2500$$

→

$$30000 \times \frac{1}{4} \times \frac{9}{12} = 5625$$

40625



HD Cloud

eg 4 →

C.Y.

P.Y.

profit
P.sh

12

12

12000 (due to B.sh.)

10k.

EPS

8

10

So people believe that my earnings have come down but its not the case why becoz of bonus issue/sh. my reserves have been capitalised. so users might misjudge calling so in order to make aware of this to users. L.Y. EPS will be restated



So Co. restated E.P.S. of L.Y.

$$\text{i.e. } \frac{100000}{12500}$$



$$= ₹ 8$$

eg. 5

	C.Y.	L.Y.
PAT	125000	100000
E.sh.	12500 (bcoz of B.I.)	10000
EPS	10	10

$$\text{Restated} \Rightarrow \frac{100000}{12500}$$

$$\Rightarrow ₹ 8$$

Question # 13

On 31.3.2002, the issued share capital of a company consisted of ₹ 10 crore ES of ₹ 25 each and ₹ 5,00,000 in 10% cumulative PS of ₹ 1 each. On 1.10.2002, the company issued 10,00,000 ES fully paid up by way of capitalisation of reserves in proportion of 1:4 for the year ended 31.3.2003

Profit for the year 01-02 and 02-03 is ₹ 4.5 lacs and ₹ 5 lacs

Calculate EPS for 01-02 and 02-03

Solⁿ:- i) Notes.

$$a) \text{ no. of E.sh. on 31-3-02} = \frac{₹ 10 \text{ Cr}}{₹ 25} = 400000$$

$$b) \text{ BAF} = 1 + \frac{1}{4} = \frac{5}{4}$$



ii) EATESH

	01-02	02-03
PAT	450000	500000
Pref. Div. @ 10%	<u>(50000)</u>	<u>(50000)</u>
	<u>400000</u>	<u>450000</u>



iii) WANEES.

	01-02	02-03.
Op. bal.	4000000	5000000
		$(402 \times \frac{5}{4})$

iv) EPS.

	01-02	02-03
Basic EPS	$\frac{400000}{4000000}$	$\frac{450000}{5000000}$

$$\Rightarrow 0.10$$

$$\Rightarrow 0.09$$

$$\text{BEPS (Restated) (01-02)} = \frac{400000}{5000000}$$

$$\Rightarrow 0.08$$

Question # 14

PARTICULARS	2015 - 16	2016 - 17
Opening balance	50,000	75,000 Shares
Closing	Shares	incl. Bonus
PAT	₹ 20,00,000	₹ 30,00,000
Bonus Issue on 1.4.2016 in 1:2 ratio		

Calculate BEPS

$$BAF \Rightarrow 1 + \frac{1}{2} = \frac{3}{2}$$

Solⁿ:- EPS.

a) Basic EPS (15-16) = $\frac{20L}{50K} = ₹ 40$

b) Basic EPS (16-17) = $\frac{30L}{75K} = ₹ 40$

c) Basic EPS (Restated) (2015-16) = $\frac{20L}{75K} = ₹ 26.67$
 \downarrow
 $(50K \times \frac{3}{2})$

Question # 15

ILL 5 OF SM

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	BAF = $1 + \frac{1}{3} = \frac{4}{3}$
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.

Solⁿ:-

op. bal.	1000000 × $\frac{4}{3} \times \frac{12}{12}$	1333333
Fresh issue	200000 × $\frac{4}{3} \times \frac{10}{12}$	222222
Fresh issue	250000 × $\frac{1}{2}$	208333

Question # 16

Earnings for 2015-16 ₹ 5,00,000

Earnings for 2016-17 ₹ 5,80,000

DATE	PARTICULARS	SHARES
01.04.2015 ✓	Balance of ES of ₹ 10 each at the beginning of the year	40,000 (15-16)
01.07.2015 ✓	Issued ES of ₹ 10 each	10,000 (15-16)
01.08.2016 ✓	Issued ES of ₹ 10 each	15,000 (16-17)
01.10.2016 ✓	Bonus in the ratio 1:8	(16-17)

$$BAF = 1 + \frac{1}{8} = \frac{9}{8}$$

Calculate BEPS

Solⁿ :- (i) W.A.N.E.SOp. balance.
fresh issue.

15-16

40000

7500

(10000 × $\frac{9}{12}$)

47500

16-17.

56250

(50000 × $\frac{9}{8}$)

11250

(15000 × $\frac{9}{8}$ × $\frac{100}{100}$)

67500

ii) EPS

$$a) \text{ BEPS (15-16)} = \frac{500000}{47500} = 10.53$$

$$b) \text{ BEPS (16-17)} = \frac{580000}{67500} = 8.59$$

$$c) \text{ Restated BEPS (15-16)} = \frac{500000}{47500 \times \frac{9}{8}} = 9.36$$

Earnings for 2015-16 ₹ 6,00,000

Earnings for 2016-17 ₹ 8,00,000

DATE	PARTICULARS	SHARES
01.04.2015	Balance of ES of ₹ 10 each at the beginning of the year	40,000
01.11.2015	Issued ES of ₹ 10 each	10,000
01.06.2016	Issued ES of ₹ 10 each	15,000
01.08.2016	Bonus in the ratio 1:5	
01.10.2016	Issued ES of ₹ 10 each	10,000

Calculate BEPS

Solve it

RIGHT SHARES

b) Right shares :-

i) in case of Right Shares, fresh equity shares are issued to existing shareholders at concessional rate. (i.e. rate lower than the M.P.)

eg:-

10 pencils \Rightarrow 1 pencil = ₹ 10
 ₹ 100
 ₹ 10

but 9 pencils @ ₹ 10 = ₹ 90
 So I can say I purchased 9 pencils

and got 1 free.



ii) ∴ the shares are issued at concessional rate
∴ Bonus element in it which needs to be adjusted as under

Wanes of C.Y.

$$\frac{\text{no. of E.sh. O/s before Right issue} \times \text{R.A.F.} \times \text{no. of months till Right issue.}}{12m.}$$

Add.

$$\frac{\text{no. of E.sh. incl. Right shares} \times \text{no. of months After Right issue.}}{12m.}$$

P.Y. EPS to be restated.

$$\Rightarrow \frac{\text{Restated B.E.P.S. of P.Y. EATPSH}}{\text{WANES of P.Y.} \times \text{R.A.F.}}$$

Notes :-

i) Right Adjustment factor (RAF) = $\frac{\text{Cum. Right price}}{\text{Ex right price.}}$

ii) Cum Right price (C.R.P.) = price of E.sh. incl. price of rights.

iii) Ex Right price (E.R.P.) =



$$\left(\text{no. of E.sh before R.I.} \times \text{C.R.P.} \right) + \left(\text{no. of R.s. issued.} \times \text{Rights price} \right)$$

Total no. of E.sh. incl. Right sh.

eg) Suppose

HD Ltd. \Rightarrow 3000 sh.; R.sh.

MP = ₹ 30 ✓✓

R.sh. @ ₹ 25 \rightarrow 3000 sh.

\Rightarrow 3000 sh \times 25

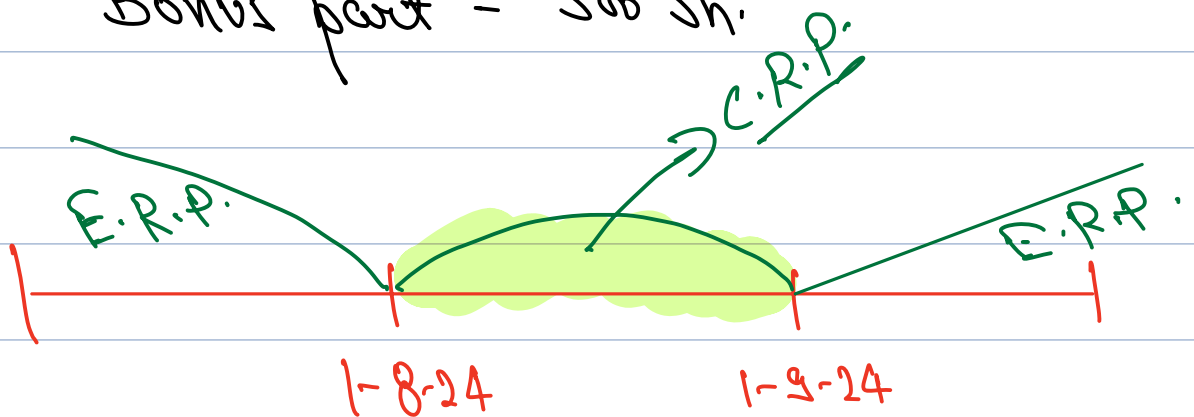
\Rightarrow 75000 ✓

$$\Rightarrow \frac{75000}{\text{₹ } 30} = 2500 \text{ shares.}$$

paid part = 2500 sh.

Bonus part = 500 sh.

iv)





R.Sh.
decl.

Record
Date.



eg-6 12000 E.Sh. with M.P. of ₹ 30
Co. off. Right shares in 1:4 @ ₹ 24

$$\text{E.R.P.} \Rightarrow \frac{4 \times 30 + 1 \text{ E.Sh.} \times 24}{5} \Rightarrow 28.8$$

E.R.P.

$$\frac{12000 \times 30 + 3000 \times 24}{15000} \Rightarrow 28.8$$

∴ C.R.P. 30
E.R.P. 28.8

Cost of Rights: 1:2 → Bonus

$$\therefore \text{R.A.F.} = 1 + \frac{1.2}{28.8} = \frac{30}{28.8} = 1.04167$$

OR



Existing = 12000 sh.

$$\therefore \text{R. Sh. offer} = \frac{1}{4} \times 12000$$

$$\Rightarrow 3000 \text{ sh @ ₹ 24.}$$

$$\therefore \text{amt. req. to purch. R. Sh.} \Rightarrow 3000 \times 24$$
$$\Rightarrow 72000$$

if with ₹ 72000 we would go to market then purchased only $\Rightarrow \frac{72000}{28.8} = 2500 \text{ sh.}$

$$\therefore \text{Extra Shares} = 3000 - 2500$$
$$= 500 \text{ shares}$$

These extra sh. we got free bcoz we had originally 12000 sh.

$$\therefore \text{RAF} = 1 + \frac{\text{Gain}}{\text{Original}}$$

$$= 1 + \frac{500}{12000} = \frac{12500}{12000}$$

$$= \frac{125}{120}$$



eg. 7 HD Ltd has 5000 E.sh. O/S on 1-1-24.

On 31-3-24 R.I. is made in the ratio of 1:5 for ₹ 7.



M.P. of shares before R.I. is ₹ 10
 PAT for 2024 ⇒ ₹ 110000
 2023 ⇒ ₹ 100000

Solⁿ :- i) Notes.

a) no. of R.S. issued = $\frac{1}{5} \times 5000 = 1000 \text{ sh.}$

b) E.R.P. = $\frac{5 \text{ sh.} \times ₹ 10 + 1 \text{ sh.} \times ₹ 7}{6} \Rightarrow ₹ 9.5$

c) R.A.F. = $\frac{CRP}{ERP} = \frac{10}{9.5}$

ii) E.A.T.E.S.H

2024

2023

110000

100000

iii) W.A.N.E.S.

for 2023

Op. Bal.

5000

for 2024.

→ Period before



$$\text{Op. bal.} \quad 5000 \times \frac{10}{9.5} \times \frac{3}{12} \quad \text{R.F.} \quad 1316$$

$$\text{Fresh iss.} \quad 6000 \times \frac{19}{12} \quad 4500$$

$$(5000 + 1000)$$

\downarrow \downarrow
 op. R.Sh.

Period after rights

$$5816$$

iv) EPS

$$\text{BEPS (2023)} = \frac{100000}{5000} = ₹ 20$$

$$\text{BEPS (2024)} = \frac{110000}{5816} = ₹ 18.91$$

$$\text{Restated BEPS (2023)} = \frac{100000}{5000 \times \frac{10}{9.5}} = ₹ 19$$

Question # 18

On 1.4.2015, X Ltd had 20,000 ES. Fair Value (FV) on 1.8.2015 was ₹ 5
 Rights announced on 1.8.2015 at ₹ 4, in the ratio of 1:4
Calculate theoretical ex-right price and bonus fraction

Solⁿ

$$\text{ERP} = \frac{4 \text{ sh} \times 5 + 1 \text{ sh} \times 4}{4 + 1}$$

$$\Rightarrow ₹ 4.8$$



$$RAF \Rightarrow \frac{CRP}{ERP} = \frac{5}{4.8}$$

HD**Question # 20**

181ac

At 31.12.2001, the issued share capital of a company consisted of 1.8 million ordinary shares of ₹ 10 each, fully paid. The profits for the year ended 31.12.2001 and 31.12.2002 amounted to ₹ 6,30,000 and ₹ 8,75,000. On 31st March 2002 the company made a right issue on 1 for 4 basis at ₹ 30. The market price of the shares immediately before the right issue was ₹ 60. Calculate EPS

Soln: i) Notes

$$a) \text{ no. R.s. issued} = 1800000 \times \frac{1}{4} = 450000$$

$$b) \text{ E.R.P.} = \frac{450000 \times 60 + 1800000 \times 30}{5} = 54$$

$$c) \text{ RAF} = \frac{60}{54}$$

ii) EATESH

2001	2002
630000	875000

iii) W.A.N.E.S.

for 2001

Op. bal.

1800000

for 2002

Op. bal.

$$1800000 \times \frac{10}{10} \times \frac{3}{12} \Rightarrow 500000$$



$$\begin{array}{r} \text{Right issue} \quad 22.5L \times \frac{10}{12} \quad \Rightarrow 1687500 \\ \downarrow \\ (18L + 4.5L) \quad \underline{\underline{2187500}} \end{array}$$

iv) EPS

$$\text{BEPS (2001)} = \frac{630000}{1800000} = 0.35$$

$$\text{BEPS (2002)} = \frac{875000}{2187500} = 0.40$$

$$\text{Restated BEPS (2001)} = \frac{630000}{18L \times \frac{60}{54}} \Rightarrow 0.315$$

Question # 23

Net profit for 2015 - 16	₹ 5,00,000
Net profit for 2016 - 17	₹ 7,00,000
1.4.2015 - No. of shares outstanding	1,00,000 shares
1.5.2015 - fresh issue	30,000 shares
1.7.2016 - fresh issues	40,000 shares
1.10.2016 - Right issues	10:17 @ 15
MV before rights	₹ 20

Calculate EPS

Solⁿ:- i) Notes

$$a) \text{ no. of Right shares} = \frac{10}{17} \times (1 \text{ lac} + 30K + 40K)$$



$$b) ERP = \frac{17 Sh. \times 20 + 10 Sh. \times 15}{27} = 105500$$



$$\Rightarrow ₹ 18.15$$

$$c) RAF \Rightarrow \frac{CRP}{ERP} = \frac{20}{18.15}$$

ii) EATESH

15-16

500000

16-17

700000

iii) WANES

for 15-16

Op. Bal.

fresh issue

$$30000 \times \frac{11}{12}$$

100000

27500

127500

for 16-17

Op. Bal.

$$130000 \times \frac{20}{18.5} \times \frac{5}{12}$$

71625

F.I.

$$40000 \times \frac{20}{18.5} \times \frac{3}{12}$$

11020



R.I.

$$270000 \times \frac{6}{12}$$

$$\frac{135000}{217645}$$

1
130K + 40K + 100K.
Op. bal. C.Y. R.S.

HD
MENTORING
HARSHIT DWIVEDI
CA FOUNDATION | CA INTERMEDIATE | CA FINAL

iv) EPS

$$a) \text{ BEPS (15-16)} = \frac{500000}{127500} = 3.92$$

$$b) \text{ BEPS (16-17)} = \frac{700000}{217645} = 3.22$$

$$c) \text{ Restated BEPS (15-16)} = \frac{500000}{127500 \times \frac{20}{18.15}} = 3.56$$

TYK Q.1

ABC Ltd	1 January 20X1	Shares in issue 1,000,000
	31 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.

Solⁿ: i) Notes

$$a) \text{ no. of R. sh.} = \frac{1}{5} \times 10L = 200000$$

$$b) \text{ ERP} = \frac{5 \times 1 + 15h \times 0.90}{6} = 0.9833$$



$$c) RAE \Rightarrow \frac{1}{0.9833}$$

ii) W.A.N.E.S.

$$\text{Op. bal.} \quad 102 \times \frac{1}{0.9833} \times \frac{3}{12} = 254246$$

$$\text{R. sh.} \quad 122 \times \frac{900000}{1154246}$$

TYK Q.4 ICAI S.M.

Calculate Basic EPS for period ending 20X0, 20X1 and 20X2, when

	20X0	20X1	20X2
Profit attributable to ordinary equity holders of the parent entity	₹ 1,100	₹ 1,500	₹ 1,800
Shares outstanding before rights issue			500 shares
Rights issue	1:5	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 1 st March 20X1:			₹ 11.00 C.P.P
Reporting date			31 December

Solⁿ :- i) Notes

$$a) \text{ no. of R. sh} = \frac{1}{5} \times 500 = 100 \text{ sh.}$$

$$b) \text{ E.R.P.} = \frac{5 \times 11 + 1 \times 5}{6} = ₹ 10$$



$$c) R.A.F. = \frac{11}{10}$$



ii) EATESH

2010

₹ 1100

2011

₹ 1500

2012

₹ 1800

iii) WANES

for 2010

Op. bal.

500

for 2011

Op. bal.

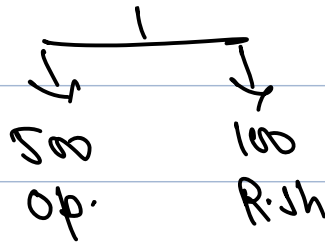
$$500 \times \frac{11}{10} \times \frac{2}{2}$$

₹ 2

R. issue

$$600 \times \frac{1}{2/10}$$

₹ 3



₹ 52

for 2012

Op. bal.

600

iv) EPS

2010

2011

2012



i) EATRSH	₹ 1100	₹ 1500	₹ 1800
ii) WANTS	<u>500</u>	<u>592</u>	<u>600</u>
iii) BEPS (1/ii)	<u>2.2</u>	<u>2.54</u>	<u>3</u>

iv) Restated BEPS (2010) $\Rightarrow \frac{1100}{500 \times \frac{11}{10}} = 2.0$

C) Participating PREFERENCE SHARES

Participating pref. sh. are those pref. sh. which also participate in undistributed earnings. i.e. Earnings left after pref's equity dividend.

Question # 35

LL 15 ICAI SM

An entity has two classes of shares in issue
5,000 Non - Convertible Preference Shares
10,000 Equity Shares

The PS are entitled to dividend of ₹ 5 per share before any dividend are paid on ES. Equity dividends are then paid in which the PSH do not participate. Each PS then participate in any additional ordinary dividend above ₹ 2 @ 50% of any additional dividend payable on ES

The entity's profit is ₹ 1,00,000 and dividend of ₹ 2 per share are declared on ES

Compute the allocation of earnings for the purpose of calculation of BEPS when an entity has ES and participating EI that are not convertible into ES.

Solⁿ :-

i) PAT	100000
Prefer. Div. (5000 x 5)	(25000)



$$\begin{array}{r} \text{Eq. Div. } (10000 \times 2) \quad (20000) \\ \text{profit after Dividend. } \underline{55000} \end{array}$$



ii) let addⁿ Equity Dividend be x .
 \therefore addⁿ pref. Dividend be $0.5x$.

Hence Addⁿ Eq div. + Addⁿ pref. Div. $\Rightarrow 55000$

$$10000 \times x + 5000 \times 0.5x = 55000$$

$$12500x = 55000$$

$$x = 4.4$$

$$\therefore 0.5x = 2.2$$

$$\therefore \text{EPS for E. Share} = 2 + 4.4 = 6.4$$

$$\text{EPS for PSH} = 5 + 2.2 = 7.2$$

Question # 36

ILL 16 ICAI SM

Profit attributable to shareholders of Parent entity	₹ 1,00,000
Equity Shares	10,000
Non-Convertible Preference Shares	6,000
The PS are entitled to dividend before any dividend are paid on ES	₹ 5.5
After ordinary shares have been paid dividend of ₹ 2.1 per share, Preference Shares participate in any additional dividend on 20:80 ratio with Equity Shares.	

Compute the allocation of earnings for the purpose of calculation of BEPS when an entity has

ES and participating EI that are not convertible into ES

Solⁿ i) PAT 100000

$$\text{pref. Div. } (6000 \times 5.5) \quad (33000)$$



$$\text{Equity Div. } (10000 \times 2.1) \quad \underline{21000}$$
$$\text{Profit after Div.} \quad \underline{46000}$$



ii) let addⁿ Div. pay. per share = x .

$$\therefore \text{for Equity sh} = 0.8x$$
$$\rightarrow \text{for pref. sh} = 0.2x.$$

Hence $10000 \times 0.8x + 6000 \times 0.2x = 46000$

$$8000x + 1200x = 46000$$
$$9200x = 46000$$
$$x = 5$$

$$\therefore 0.8x = ₹4$$
$$\therefore 0.2x = ₹1$$
$$\therefore \text{EPS for ESH} = 2.1 + 4 = 6.1$$
$$\text{EPS for PSH} = 5.5 + 1 = 6.5$$

HD Gift.

* if pref. sh. are not participating.

$$\text{B.E.P.S.} = \frac{100000 - 33000}{10000} = ₹6.7$$

#4 Diluted EPS



i) Diluted EPS means Reduction in EPS calculated on assumption that potential ordinary shares (POS) will be issued



ii) POS are those instruments which would be converted into equity shares in future w/o payment.

- eg →
- Convertible pref. sh.
 - Convertible Bonds / Debentures.
 - Options or warrants (only free per cent)
↓
Refereg-8

eg-8 :- suppose.

1000 shares 6000 options @ 50, m.p. = 75

$$6000 \text{ sh} - \frac{6000 \times 50}{75} \quad \text{or} \quad 6000 \left(\frac{75-50}{75} \right)$$

$$6000 \text{ sh} - 4000 \text{ sh} \Rightarrow 2000 \text{ sh.}$$

$$= 2000 \text{ sh.}$$

d) Contingent shares.

it means those shares which are issued in case of Business Combination subject to fulfillment of certain conditions in future.

eg-9 → opening of new stores.
profit targets
Sales targets.

iii) if due to POS, Basic EPS increases then such POS are known as antidilutive and such POS should be ignored.

eg-10

E.ATESH ₹ 500000

No of E.sh. 500000

12% 6000 pref. shares of ₹ 100 each = 600000
Each pref. sh. is convertible into 5 E.sh.

BEPS

$$\Rightarrow \frac{500000}{500000} = 1$$

DEPS.

$$\Rightarrow \frac{500000 + (12\% \text{ of } 6L)}{500000 + (6000 \times 5)}$$





⇒

1.08
↑ EPS

↓
Anti dilutive.



iv) EATESH for DEPS

Particulars	Amount	Do I = date of issue
EATESH of BEPS	xxx	
Add: Savings in pref. Div. (Div. % × Total Face value × P.F.)	xxx	D.O.C. = Date of Conversion
Add: Savings in int. (Int. % × Total face value (1-t) × P.F.)	xxx	Y.S. = yr. starting Y.E. = yr. end.
Less: Add ⁿ Remuneration or Bonus due to ↑ in profit (Bonus % × amount of ↑ in profit)	xxx	P.F. = Do I or y.s. (w. I. Later)
Less: F.V. changes to n.	(xxx)	to D.O.C. or yr. end (w. I. earlier)
	xxx	

v) WANEs for DEPS

Particulars	Amount	MP = Mkt price EP = Exercise price Es = Eq. Shares
WANEs for BEPS	xxx	
Add: Options	xx	

no. of options $\times \frac{(MP - EP)}{MP} \times P.F.$



Add: no. of equity shares issued to convertible pref. shares or Debentures

(no. of eq. sh. as per P.S./Deb) \times no. of p.s. or Deb. \times P.F.

Add: Contingent shares

no. of shares promised \times P.F.

PS = pref. sh.



xx

PF =

Date of agreement or Y.S.

(W.I. later)

to

Date of Issue or Y.E.

xx

xxx

(W.I.E.)

Note 1:- if there are multiple Conversion Ratio then consider that ratio which gives rise to maximum no. of eq. shares on Conversion.

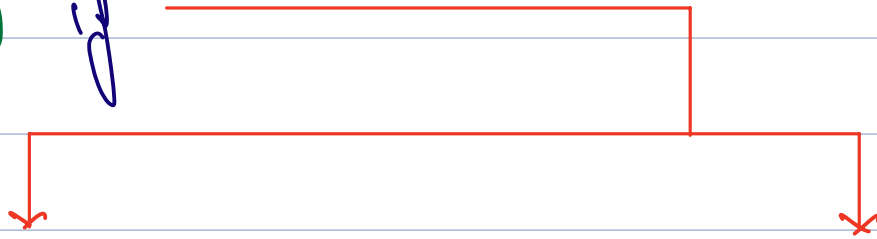
Note 2:- All convertible pref. shares & Deb. are C.F.I. & hence when we are calculating Savings in Int., then it should be calculated on Debt position of CFI.

But

A) we are to consider it as CFI only when M.ROI w/o Conversion is given



B) if



instruments are
 Compulsory Convertible
 OR
 the option of conversion
 is with the issuer
 Company.
 then

Instruments are
 Convertible at the
 option of holder
 then
 Debt portion.
 \Rightarrow P.V. of Face Value
 + P.V. of int.

Debt portion =
 PV of int.

$PVA_{\downarrow} (MROI, r\%) \times \text{int.}$

Face Value of Deb \times Coupon rate.

Note-3 :- Incremental EPS = $\frac{\text{Incremental Earnings}}{\text{Incremental shares}}$



CASE - 1

OPTIONS



Question # 25

PAT	₹ 30,00,000
No. of shares outstanding	12,00,000 shares
Market price	₹ 25
options	2,00,000 shares @ ₹15

Calculate BEPS and DEPS

Solⁿ :- i) Notes

$$a) \text{POS} = 200000 \times \left(\frac{25 - 15}{25} \right) = 80000 \text{ sh.}$$

ii) EPS

$$a) \text{BEPS} = \frac{3000000}{1200000} = ₹ 2.5$$

$$b) \text{DEPS} = \frac{3000000}{1200000 + 80000} = ₹ 2.34$$

Question # 26

ILL 10 ICAI SM

At 31.12.2007 and 2008, the issued share capital of an entity consisted of 40,00,000 ES of ₹ 25 each. The entity has granted options that give holders the right to subscribe for ES between 2006 and 2009 at ₹ 70 per share. The options outstanding at 31.12.2007 and 2008 were 6,30,000. PAT for 2007 and 2008 amounted to ₹ 5,00,000 and ₹ 6,00,000 respectively. Average market price of share for year 31.12.2007 and 31.12.2008 is ₹ 120 and ₹ 160 respectively.

Calculate basic and diluted EPS

Solⁿ :-

i) POS

2007

$$630000 \times \left(\frac{120 - 70}{120} \right)$$

2008

$$630000 \times \left(\frac{160 - 70}{160} \right)$$



ii) BEPS

$$\Rightarrow 262500$$

$$\frac{500000}{4000000} = 0.125$$

$$\Rightarrow 354375$$

$$\frac{600000}{4000000} = 0.15$$

iii) DEPS

$$\frac{500000}{4262500} = 0.12$$

$$\frac{600000}{4354375} = 0.14$$

Question # 39

ILL 11 SM, PQ. 2 SM, RTP NOV 21

Profit attributable to shareholders of Parent entity for the year 20X1	₹ 12,00,000
Weighted average number of ordinary shares outstanding during year 20X1	5,00,000 shares
Average market price of one ordinary share during year 20X1	₹ 20.00
Weighted average number of shares under option during year 20X1	1,00,000 shares
Exercise price for shares under option during year 20X1	15.00

Calculate basic and diluted

Solⁿ :- i) Notes

$$a) \text{Pos} = 100000 \times \left(\frac{20 - 15}{20} \right) = 25000$$

ii) EPS

$$a) \text{BEPS} = \frac{1200000}{500000} = 2.4$$

$$b) \text{DEPS} = \frac{1200000}{512500} = 2.29$$

CASE - 2

CONVERTIBLE DEBENTURES

Solⁿ:- i) Notes



$$a) \text{POS} = 50000 \times 8 = 400000$$

$$b) \text{Savings in int.} = 50000 \times 11\% \times (1-0.3) \\ = 38500$$



ii) EPS

$$a) \text{BEPS} = \frac{200 \text{ lac}}{40 \text{ lac}} = ₹ 5$$

$$b) \text{Incremental EPS} = \frac{38500}{400000} = ₹ 0.09625$$

$$c) \text{DEPS} = \frac{200 \text{ lac} + 38500}{40 \text{ lac} + 40} = ₹ 4.55$$

Question # 29

ILL 8 ICAI SM

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 earnings per incremental share for the convertible bonds.

Solⁿ:-

$$\text{Incremental EPS} = \frac{\text{Savings in int. (increas)}}{\text{POS (incr. sh.)}}$$

$$= \frac{₹ 1000 \times ₹ 100 \times 10\% \times (1-0.21)}{1000 \times 20 \text{ E. sh.}}$$

$$= 0.395$$

Question # 31

Net profit for 2015-16	₹ 75,50,000
Net profit for 2016-17	₹ 100,25,000
No. of shares outstanding on 1.4.2015	5,00,250 Shares
Bonus issue on 1.1.2017 → BAF ⇒ $\frac{3}{2}$	1 : 2
On 1.1.2017 – 12% Convertible Debentures issued <i>DoI int. s. to Doc. IYE. 1.1.17 to 31-3-17 ⇒ 3m.</i>	1,00,000 Debentures pf NV ₹ 100
Conversion ratio of above Debenture	1 Debenture = 10 Equity Shares

Calculate BEPS and DEPS

Solⁿ:- i) Notes

a) BAF = $1 + \frac{1}{2} = \frac{3}{2}$

b) POS = $100000 \times 10 \text{ E.Sh.} \times \frac{3}{2} \times \frac{3}{12} \Rightarrow 375000$

Bonus will be issued to Convertible deb

as per IND AS 32 & SEBI reg.

2) EATESH

EATESH for BEPS	10025000
Savings in interest	300000

$(100000 \times 10 \times 12\% \times \frac{3}{12})$

EATESH for DEPS	<u>10325000</u>
-----------------	-----------------

3) EPS



$$a) \text{ BEPS (15-16)} = \frac{₹ 550000}{500250} = 15.09$$



$$b) \text{ Restated BEPS (15-16)} = \frac{₹ 550000}{500250 \times \frac{3}{2}} = 10.062$$

$$c) \text{ BEPS (16-17)} = \frac{10025000}{500250 \times \frac{3}{2}} = 13.36$$

$$d) \text{ DEPS} = \frac{10325000}{(500250 \times \frac{3}{2}) + 375000} = 9.17$$

Question # 32

ILL 9 ICAI SM, SIMILAR TO JULY 21

Profit before <u>interest</u> , <u>FV changes</u> and <u>tax</u> for year ended <u>30.06.2002</u> (Change in options' FV reported loss of ₹ <u>2,500</u>)	₹ <u>8,25,000</u>
Profit before interest, FV changes and tax for year ended <u>30.06.2003</u> (Change in options' FV reported loss of ₹ <u>2,650</u>)	₹ <u>8,95,000</u>
Tax rates (No tax consequence on change in FV of Options)	33%
30.6.2001 – No of ES of ₹ 1 each	₹ 15,00,000 ✓
<u>1.10.2001</u> – Issued 8% convertible loan stock of ₹ 100 each for cash <u>DoI</u> at par Convertible at any time during <u>three years 2006 to 2009</u> into the number of Equity Shares set out below <ul style="list-style-type: none"> ✓ 30.06.2006 – <u>135</u> Equity Shares 30.06.2007 – <u>130</u> Equity Shares 30.06.2008 – <u>125</u> Equity Shares 30.06.2009 – <u>120</u> Equity Shares If they are not converted by <u>2009</u> , they would be <u>redeemed at par.</u>	₹ 12,50,000

Calculate **BEPS** and **DEPS**



In 01-02

DOI / Y.S. to Doc / Y.E.
(later) (earlier)

1-10-01 or 1-7-01 to 30-6-06 / 30-6-02

9m.



In 02-03

DOI / Y.S. to Doc / Y.E.
(later) (earlier)

1-10-01 / 1-7-02 to 30-6-06 / 30-6-03

12m.

Solⁿ: i) Notes

$$POS = 12500 \times 135 \text{ shares} = 1687500$$

ii) E.A.T.E.S.H.

Particulars	01-02	02-03
PBIT & F.V. changes	825000	895000
- interest $(1250000 \times 8\% \times \frac{9}{12})$	(75000)	(105000)
		$(1250000 \times 8\% \times \frac{12}{12})$
- F.V. Δ lon.	(2500)	(2650)
PBT	747500	792350
- Tax @ 33%	(247500)	(262350)
PAT (for BEPS)	500000	530000
Add: F.V. Δ lon.	2500	2650

(When deb. gets converted option will not be there)



Add: saving in int.

$$(75000 \times (1 - 0.33))$$

EATESH for DEPS

50250

67000

552750

$$(100000 \times (1 - 0.33))$$

552750

599650

iii) EPS

a) BEPS

500000

530000

1500000

1500000

$\Rightarrow 0.33$

$\Rightarrow 0.35$

b) DEPS

552750

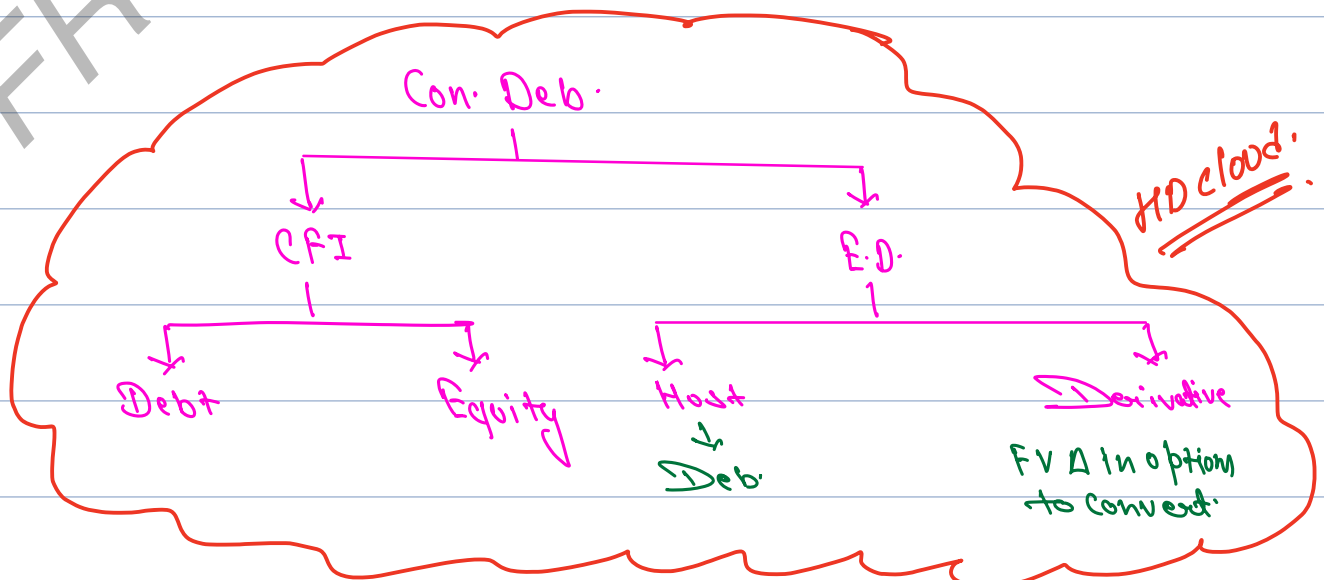
599650

$$\frac{1500000 + 168750 \times 9}{12}$$

$$1500000 + 168750$$

$\Rightarrow 0.20$

$\Rightarrow 0.19$



An entity issues 2,000 convertible bonds at the beginning of the 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

₹ 2,00,000. Interest is payable annually in arrear at a nominal annual interest rate of 6%. Each bond is convertible at any time upto maturity into 250 ES. The entity has the option to settle the principal amount of the convertible bonds in ES or cash. When the bonds were issued, the prevailing market ROI for similar debt without conversion options is 9%. At the issue date market price of one ES is ₹ 3. Profit attributable to 12,00,000 ES of P for year 1 is ₹ 10,00,000.
Convertible bonds outstanding is 2000

Calculate BEPS and DEPS

Solⁿ: i) Notes

a) Pos = 2000 bonds × 250 E.sh = 500000 sh.

b) ∴ Convertible bonds with market ROI is given ∴ it is C.F.I. and ∴ the option of conversion is with entity ∴ we assume it is fully convertible.

c) Debt position

$$\Rightarrow \text{Int as per coupon rate} \Rightarrow 6\% (2000 \times 1000) \\ \Rightarrow ₹ 120000$$

$$\Rightarrow \text{Debt} = \text{P.V. of interest} \\ = \text{PVA}_3 (9\%, 3 \text{ yrs}) \times ₹ 120000 \\ = 2.5313 \times ₹ 120000 \\ = ₹ 303756$$

ii) E.A.T.E.S.H



EATESH for BEPS = ₹1000000

Savings in interest 27338
(303756 × 9%)



EATESH for DEPS 1027338

iii) W A N E S

no. of E.sh (BEPS) 1200000
+ P O S 500000

no. of E.sh. (DEPS) 1700000

iv) E P S

a) BEPS = $\frac{1000000}{1200000} = 0.83$

b) DEPS = $\frac{1027338}{1700000} = 0.6043$

TYK Q. 2 ICAI SM (similar to May 22)

1 January Shares in issue 1,000,000

2024

5% Convertible bonds ₹ 100,000

(terms of conversion 120 ordinary shares for ₹ 100)

31 March 2024 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.

Solⁿ i) Notes



Converted into Es on 31-3 \Rightarrow ₹ 100 \rightarrow 120 sh.

₹ 25000 \rightarrow ??



$$\frac{120 \times 25000}{100}$$

\Rightarrow 30000 shares.

not converted \rightarrow up to 31-12 \rightarrow

₹ 100 \rightarrow 120 sh.

₹ 75000 \rightarrow ??

$$\frac{75000 \times 120}{100}$$

\Rightarrow 90000 sh.

ii up to 31-3

₹ 100 \rightarrow 120 sh.

₹ 25000 \rightarrow ??

$$\frac{25000 \times 120}{100}$$

\Rightarrow 30000 sh.

JS/DOA (later) \rightarrow 1-1-24
to
JE/DOI (earlier) \rightarrow 31-3-24
 \Rightarrow 3m.

Summary

₹ 1,00,00,000

₹ 75,000 not converted.

₹ 25,000 Converted

No. of sh. \Rightarrow 90000 sh.
Pos

30000 sh.



↓
 POS.
 3m.
 ↓
 DEPS.
 ↓
 POS.
 ↓
 3m.
 ↓
 EPS

ii) EATESH

EATESH for BEPS	20000
+ Savings in int.	
$75000 \times 5\% \times (1-0.3)$	2625
$25000 \times 5\% \times (1-0.3) \times \frac{3}{12}$	219
EATESH for DEPS	<u>202844</u>

iii) WANES

Op. Balance		1000000
Conversion	$30000 \times \frac{19}{12}$	<u>22500</u>
WANES for BEPS		1022500
+ POS	$90000 \times \frac{12}{12}$	90000
	$30000 \times \frac{3}{12}$	<u>7500</u>
		<u>1120000</u>

iv) EPS

$$a) \text{ B.E.P.S.} = \frac{200000}{1022500} = 0.196$$

$$b) \text{DFPS} = \frac{202844}{1120000} = 0.181$$



Question # 47

Nov 22 (8M) MTP [May 2020]

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 (NCI)	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:

- I. 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.
- II. 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.
- III. ₹ 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.

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%.

Solⁿ :- i) Notes:

$$a) \text{Pos} = 10,00,00,000$$

$$b) \text{int as per coupon rate} = 18 \text{ cr} \times 6\% = 10800000$$



c) Debt portion

$$\Rightarrow \text{PV of int} + \text{P.V. of principal installments}$$

$$\Rightarrow 10800000 \times \text{PVA of } (8\%, 4 \text{ yrs}) + 180000 \times \text{PV of } (8\%, 4^{\text{th}} \text{ yr})$$

$$\Rightarrow 10800000 \times 3.31 + 180000 \times 0.74$$

$$\Rightarrow 35748000 + 13320000$$

$$\Rightarrow 168948000$$

d) Amortisation table

year	Op. bal.	Int @ 8%	Rep. inst.	Cl. bal.
31-3-02	168948000	13515840	10800000	171663840
31-3-03	171663840	13733107	10800000	174596947

ii) EATESH

PAT (02-03)

39000000

- pref. Div.

(4000000)

(800,00,000 × 0.05)

EATESH for BEPS

35000000

+ Savings in Int.

10299830

(13733107 × (1 - 0.25))

EATESH for DEPS

45299830

iii) WANEES for 02-03.



Op. Bal.	20000000
+ fresh issue. $(50 \times \frac{9}{12})$	<u>37500000</u>
WANEES (for BEPS)	237500000
+ POS	<u>10000000</u>
WANEES for DEPS	<u>337500000</u>



iv) EPS

$$a) \text{ BEPS} = \frac{35000000}{237500000} = 0.15$$

$$b) \text{ DEPS} = \frac{45299830}{337500000} = 0.13$$

Question # 45

{ MTP - NOV - 2019 }

- Mittal Motors has issued 10,00,000 numbers of 9% Cumulative Preference Shares. The company has arrears of ₹ 15 crores of preference dividend as on 31st March, 2011, it includes current year arrears of ₹ 1.75 Crores. The company did not declare dividend for equity shareholder as well as for preference shareholders. What is the amount of dividend to be reduced from profit or loss for the year for calculating BEPS ?
- Further Mittal Motors has also issued certain convertible, which are outstanding 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 should be deemed to have been converted into shares ?

- (A) At the start of the period ✓
(B) The date of issue of 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.

Solⁿ :- 1) ₹ 1.75 Cr. ∴ P.Y. arrears would have been subtracted in P.Y.



2) A)

CASE - 3

CONVERTIBLE PREFERENCE SHARES



Question # 34

Earnings available to Equity Shareholders	₹ 50 lacs
No. of ES outstanding	10,00,000
50,000, 12% Convertible Preference share of ₹ 100 each	8 ES per Preference share
Tax Rate	30%
DDT <i>(ignore)</i>	17%

Solⁿ:- i) BEPS = $\frac{5000000}{1000000} = ₹ 5$

ii) DEPS = $\frac{50L + 12\% \text{ of } (50L)}{10L + 50K \times 8}$

$\Rightarrow \frac{5600000}{1400000} = ₹ 4.$

CONTINGENTLY ISSUABLE SHARES

Question # 40 **ILL 12 OF ICAI SM**

Ordinary shares outstanding during 20X1	1,000,000 (there were no options, warrants or convertible instruments outstanding during the period)
An agreement related to a recent business combination provides for the issue of additional ordinary shares based on the following conditions:	
<i>Contingent shares:</i> ①	5,000 additional ordinary shares for each new retail site opened during 20X1
②	1,000 additional ordinary shares for each ₹1,000 of consolidated profit in excess of ₹ 2,000,000 for the year ended 31 December 20X1

₹5000 ✓

Retail sites opened during the year	one on 1 May 20X1 ^{Q.2} → Date of issue. one on 1 September 20X1 ^{Q.3} → D.O.I.
Consolidated year-to-date profit attributable to ordinary equity holders of the parent entity	₹ 1,100,000 as of 31 March 20X1 (3m)
	₹ 2,300,000 as of 30 June 20X1 (3m)
	₹ 1,900,000 as of 30 September 20X1 (3m) (including a ₹ 450,000 loss from a discontinued operation)
	₹ 2,900,000 as of 31 December 20X1 (3m)

Contingent shares (31) ←

Contingent shares (31) ←

Calculate basic and diluted EPS

Solⁿ:- Notes

- Reporting year is a C.Y.
- EPS should be calculated on Quarterly basis
Since results are given on Quarterly basis

c) Contingent shares

5000 for each
new Retail site
opened.

1000 E.Sh. for
each ₹ 1000 of profit
beyond 20Lacs.

d) Contingent shares on Retail site.

→ one Retail site opened on 1-5-01 (Q.2) → 5000sh

→ one Retail site opened on 1-9-01 (Q.3) → 5000sh

Since conditions are satisfied ∴ shares

are allotted & hence should be included in

BEPS. and if shares are not allotted then

it should be included in DEPS.

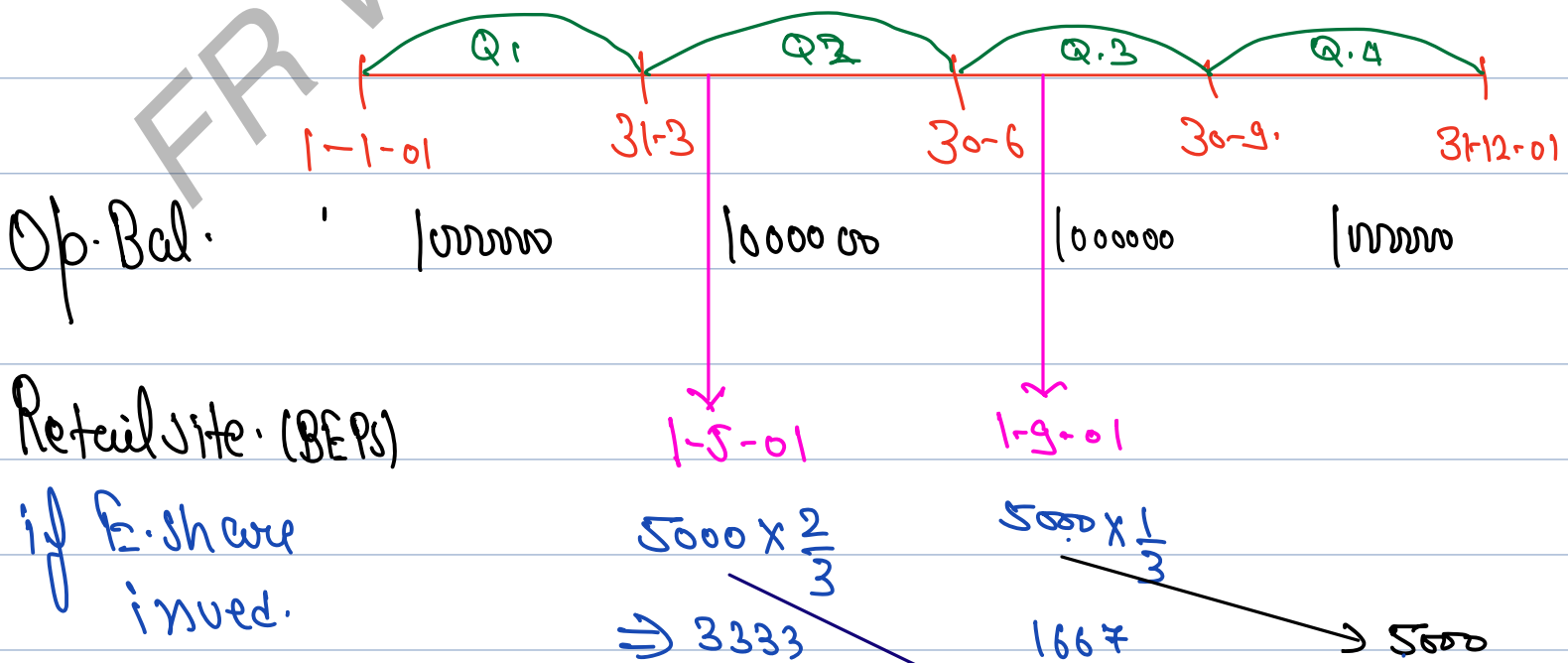
Q. has been solved using both assumptions.



c) Contingent shares based on profit
 → not issued.

profit	Comm. profit	profit for each Quarter	Expected E.sh. to be issued.
Up to 31-3	1100000	1100000	—
Up to 30-6	2300000	1200000	300000
Up to 30-9	1900000	(400000)	—
Up to 31-12	2900000	1000000	500000

∴ Calⁿ of E.sh. invale for retail store every Quarter. → POS





$$\begin{array}{r} \rightarrow 5000 \\ \hline 3333 \end{array} \quad \begin{array}{r} \rightarrow 5000 \\ \hline 667 \end{array} \quad \begin{array}{r} \rightarrow 5000 \\ \hline 10000 \end{array}$$

Retail site (DEPS)

if E.Jh. are not allotted.

DoA. on Y.S. (later)
to
DoI on Y.E. (earlier)

$$5000 \times \frac{2}{3}$$

$$5000 \times \frac{2}{3}$$

$$\Rightarrow 5000$$

$$\Rightarrow 5000$$

$$\Rightarrow 5000$$

$$\hline 5000$$

$$\hline 5000$$

$$\hline 5000$$

$$\hline 5000$$

$$\hline 10000$$

$$\hline 10000$$

g) Cal of E.Jh insuable for retail store entire year.
(POS)

BEPS \Rightarrow on 1-5-01 $\Rightarrow 5000 \times \frac{8}{12} \Rightarrow 3333$
 1-9-01 $\Rightarrow 5000 \times \frac{4}{12} \Rightarrow 1667$
5000

DEPS \Rightarrow on 1-5-01 $\Rightarrow 5000$

1-9-01 $\Rightarrow 5000$

10000

ii) EPS:

Q) BEPS	31-3-01	30-6-01	30-9-01	31-12-01	Total
EATE SH	1100000	1200000	(400000)	1000000	2900000

b) WANES:

Op. bal	100000	100000	100000	100000	100000
Cont.	-	3333	6667	10000	5000
BEPS (%)	1.1	1.19	(0.39)	0.99	2.89

b) DEPS:

	31-3-01	30-6-01	30-9-01	31-12-01	Total
DATE SH	1100000	1200000	(400000)	1000000	2900000

b) WANES:

Op. bal:	100000	100000	100000	100000	100000
Pos:					
↳ R.S.	-	5000	7000	1000	10000
profit:	-	30000	-	40000	40000
	<u>1.10</u>	<u>0.92</u>	<u>0.4</u>	<u>0.52</u>	<u>1.5</u>

vij) DEPS in case of multiple Pos

step 1 calculate Incremental Earnings.

impact of Pos on earnings.
Pos.

step 2 Rankings.



Pos should be ranked in order of Incremental earnings (lowest 1st)

Step 3 DEPS

Particulars	Earnings	Shares	EPS.
BEPS	xxx	xxx	xxx
POS	xxx	xxx	xxx

- a) if it is > BEPS means Anti dilution
 ∴ stop further calculation
 b) lowest EPS = DEPS

Question # 37
Calculate DEPS

Earnings available to Equity Shareholders	₹ 1000 lacs
No. of ES	1,000 shares
10%, 120 Convertible Preference share (1 PS = 5 ES)	₹ 8,000 lacs
12%, 600 Convertible Debenture (1 Debenture = 3 Eq Shares)	₹ 20,000 lacs
100 Share Options @ ₹ 25	MP = 36
Tax Rate	35% 30%
CDT	10%

Solⁿ:-

Step 1 Incremental earnings.

Particulars	pref. sh.	Deb.	option.
-------------	-----------	------	---------

(₹ in lacs)

a) incremental earnings.



800
(8000 x 10%)

1560
(20000 x (1 - 0.35))
x 12%

0



b) P0s

600 sh
(120 x 5)

1800 sh
(600 x 3)

31 sh
 $(\frac{36-25}{36}) \times 100$

c) incremental EPS
($\frac{a}{b}$)

1.33

0.86

0

d) Rankings
(step 2)

IIIrd

IInd

Ist

Step 3 DEPS

Particular	Numerator	Denominator	Ratio (%)
BEPs	₹ 1000	1000	₹ 1
I st Options	—	31 sh.	—
	₹ 1000	1031	0.97
II nd Deb.	₹ 1560	1800	—
	2560	2831	0.90
III rd Pref. sh.	₹ 800	600 sh	—
	₹ 3360	3431	0.98

∴ DEPS = 0.90

Q.38 is similar to Q.37.



QUESTION: -3 (Dec 20-8 Marks)

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

Net profit attributable to equity shareholders	Rs. 90,000
Number of equity shares outstanding	16,000
Average fair value of one equity share during the year	Rs. 90

Potential Ordinary Shares:

Options	900 options with exercise price of Rs. 75
Convertible Preference Shares	7,500 shares entitled to a cumulative dividend of Rs. 9 per share. Each preference share is convertible into 2 equity shares.
Applicable corporate dividend tax	8% (ignore)
10% Convertible Debentures of Rs. 100 each	Rs. 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.

Solⁿ:- Step 1 Incremental EPS.

Particulars: Options pref. sh. Deb.

a) incremental earnings 0 $7500 \times 9 = 67500$ $(10L \times (1-0.25) \times 10\%$
 $\Rightarrow 75000$

b) Pos $900 \times \left(\frac{90-75}{90}\right)$ $7500 \times 2 = 15000$ $(10000 \times 4 = 40000$

c) incremental EPS 0 4.5 1.875

(a/b)

Step 2 Rankings.

I

III

II

Step 3. DEPS.

Particular	(EATESH) Numerator	(W ANES) Denominator	Ratio
BEPS	90000	16000	5.625
+ options.	<u>1</u>	<u>150</u>	<u>5.573</u>
	90000	16150	
+ Deb.	<u>75000</u>	<u>40000</u>	<u>-</u>
	165000	56150	2.934
+ P.S.	<u>67500</u>	<u>15000</u>	<u>3.268</u>
	<u>232500</u>	<u>71150</u>	

∴ DEPS = 2.934.

Vii) Presentation in SOPL of BEPS & DEPS for CO. & DCO.

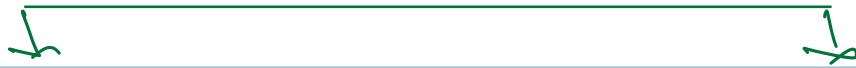
Entity with discontinued operations will Report EPS as under
Basic Diluted.

CO	xx	xx
DCO	xx	xx



Combined xx xx

if DEPS is



Antidilutive

Dilutive.

then Do not Report DEPS of any Co, DCo, Combined

then Report DEPS of all Co, DCo, Combined.

Whether in DCo it is Dilutive / Anti Dilutive.

Suppose.

	Basic	Diluted
Co	2	1.9
Dco	2	2.1
Combined	2	1.98

Report all

	Basic	Diluted
Co	2	2.1
Dco	2	1.90
Combined	2	1.98

Do not Report.

Question # 48

Dec 21 (8M) & MAY 25 (6M)

Assume following facts for company XY

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

- You are required to calculate BEPS and DEPS
- Assume in above case loss from continued operation is ₹ 10,00,000 and income from discontinued operation is ₹ 36,00,000 then calculate DEPS

Solⁿ :- Situation I

Particulars	C.O	D.C.O.	Total.
a) Earnings.	3000000	(3600000)	(600000)



b) WANES

1000000

1000000

1000000

c) POS

200000

200000

200000



BEPS (%)

₹ 3

(3.6)

(0.6)



DEPS ($\frac{a}{b+c}$)

₹ 2.5

(3.0)

(0.5)

∴ DEPS > BEPS

∴ Antidilution

But disclosed

∴ DEPS of Co < BEPS of Co.

Situation II

Particulars

C.O

D.C.O

Total

a) Earnings

(100000)

3600000

2600000

b) WANES

1000000

1000000

1000000

c) POS

200000

200000

200000

BEPS (%)

₹ 1

₹ 3.6

₹ 2.6

DEPS ($\frac{a}{b+c}$)

(0.83)

₹ 3

₹ 2.16

∴ DEPS of C.O.

is antidilutive

∴ no DEPS will be disclosed

5 Consolidated EPS (EPS for a group)



Group BEPs

EPS of Parent.

Ist calculate EPS of s.
As usual

2nd calculate EPS of P.

EATEESH

xxx → Excluding dividend recd. from Subs.

+ P's share in s's

xxx

EATEESH (Note)

a) Total EATEESH.	xxx
b) no. of E. sh. of P.	xxx
BEPs (%)	xxx

Group DEPs

Ist calculate BEPs of s
As usual

IInd calculate DEPs of s.
As usual

IIIrd EATEESH for DEPs

EATEESH of P

xxx

+ P's share of s's EATEESH for DEPs

(no. of E. sh. incl. Pos of s held by Parent x DEPs of s.)

- P's adjustment to its EATEESH due to its Pos

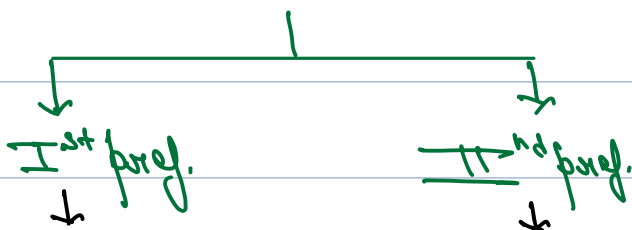
(xxx)

a)

xxx

4th

Calculate WANEs of P



no. of E. sh. held by P x BEPs of s

P's stake % x s's EATEESH

S's Eq. sh. = 5000

4000 sh. held by P

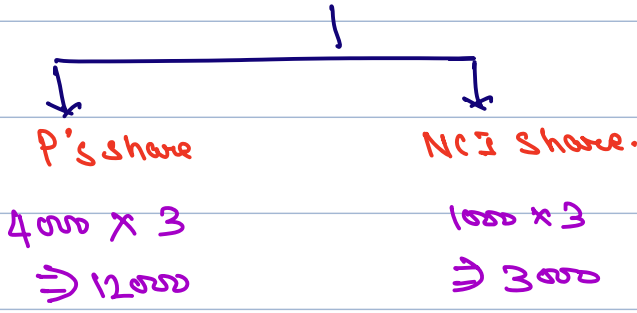
∴ BEPS of S = ₹3

including pos for
D EPS ⇒ b)

5th DEPS

⇒ ⇒ $\frac{a)}{b)}$

∴ S's EATESH = 5000 × 3 = 15000



Question # 1

P ltd has earned ₹ 10,00,000 during the year and has 40,000 equity shares.
S ltd has earned ₹ 4,00,000.
P ltd hold 80% shares in S limited
Calculate BEPS for SFS and CFS of P.

Solⁿ

i) BEPS of P for SFS = $\frac{1000000}{40000} = ₹ 25$

ii) BEPS of P for CFS = $\frac{1000000 + 4L \times 80\%}{40000} ⇒ ₹ 33$

Question # 2

PARTICULARS	P LTD	SLTD
SALES	10,00,000	5,00,000
DIVIDEND FROM S LTD	1,00,000	-
EXPENSES	(4,00,000)	(3,00,000)
PAT	7,00,000	2,00,000

P has 20,000 Equity Shares. P's Stake in S ltd is 80%

S has 10000 shares.

Calculate BEPS for SFS and CFS of P. & BEPS for S

Solⁿ:-



i) BEPs for SFS.

	P Ltd	S Ltd.
a) PAT	700000	200000
b) W.A.N.E.S	<u>20000</u>	<u>10000</u>
c) BEPs ($\frac{a}{b}$)	<u>₹ 35</u>	<u>₹ 20</u>

ii) BEPs for CFS

EAT Esh.	P.
- Dividend	700000
	<u>(100000)</u>
	600000
+ P's share in S's EATEsh.	160000
(8000 E.sh x ₹20) or	
(80% x 2L)	
a) EATEsh	<u>760000</u>
b) no. of E.sh. of P.	<u>20000</u>
BEPs ($\frac{a}{b}$)	<u>38</u>

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

PARENT :	
Profit attributable to ordinary equity holders of the parent entity	₹ 12,000 (excluding any earnings of, or dividends paid by, the subsidiary)
Instruments of subsidiary owned by the parent	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	₹ 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 33	

Solⁿ :- i) Notes.

$$\begin{aligned}
 & \text{P} \\
 \text{profit} &= ₹ 12000 \\
 \text{E.sh.} &= 10000
 \end{aligned}$$

$$\begin{aligned}
 & \text{P owns in S.} \\
 \text{ES} &= 800 = 80\% \\
 & \text{Pos}
 \end{aligned}$$

$$\text{Con. p sh.} = 300 \times 1 = 300 \text{ sh.}$$

$$\text{S.W.} = 30 \times \left(\frac{20-10}{20} \right)$$

$$\Rightarrow 15 \text{ sh.}$$

$$\begin{aligned}
 & \text{S} \\
 \text{profit} &= ₹ 5400 \\
 \text{E.sh.} &= 1000
 \end{aligned}$$

Pos

$$\text{Con Pref. sh.} = 400 \times 1 = 400$$

$$\begin{aligned}
 & \text{Sh. warrants} \\
 & \Rightarrow 150 \times \left(\frac{20-10}{20} \right) \\
 & \Rightarrow 75
 \end{aligned}$$

ii) BEPs For SFS



S

P.



PAT	5400	12000
- pref. Div.	(400)	
	<u>(400 x ₹1)</u>	<u>12000</u>
a) EATESH	5000	12000
b) WANES	<u>1000</u>	<u>10000</u>
BEPS (%)	<u>₹ 5</u>	<u>₹ 1.2</u>

iii) Calcⁿ of DEPS for SFS.

	S	P
EATESH for BEPS	5000	12000
+ Savings in Pref. Div.	<u>400</u>	<u>—</u>
a) EATESH for DEPS	<u>5400</u>	<u>12000</u>
WANES for BEPS	1000	10000
+ POS		
Con. P. sh.	400	—
S.W.	<u>75</u>	<u>—</u>
b) WANES for DEPS	<u>1475</u>	<u>10000</u>
c) DEPS (%)	<u>3.66</u>	<u>1.2</u>



iv) BEPS for group.

EATEESH

12000

+ P's share in s profit

$$Es \Rightarrow 800 \text{ sh} \times 5 \quad 4000$$

$$Ps \Rightarrow 300 \text{ sh} \times 1 \quad \underline{300}$$

a) EATEESH for group 16300

b) WANEJ 10000

c) BEPS ($\frac{a}{b}$) 1.63

v) DEPS for group

P's EATEESH

12000

+ P's share in s profit

$$E.sh = 800 \text{ sh} \times 3.66 \quad 2928$$

$$S.W. = 15 \text{ sh} \times 3.66 \quad \underline{55}$$

$$CPS = 300 \text{ sh} \times 3.66 \quad \underline{1098}$$

a) EATEESH for DEPS (grp) 16081

b) WANEJ 10000

c) DEPS ($\frac{a}{b}$) 1.6081

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.

Solⁿ:- i) Notes

P	P owns in S	S
profit 7000	ESH = 9000	profit 30000
E.sh 5000	SO = 100	ES 10000
	$(500 \times \frac{50-40}{50})$	Pos
		SW. 200
		$(1000 \times \frac{50-40}{50})$

ii) BEPS for SFS

iii) DEPS for SFS

	P	S.		P	S.
a) EATESH	7000	30000	a) EATESH (DEPS)	7000	30000
b) WANES	5000	10000	WANES for BEPS	5000	10000
c) EPS	₹14	₹3	+ Pos	-	200
			b) WANES for DEPS	<u>5000</u>	<u>10200</u>



c) DEPS ($\frac{9}{b}$)

1.4

2.94



iv) BEPS for grp

EATESH 7000
+ P's share in S' 27000
profit ($9K \times 3$)

a) EATESH for BEPS 34000

b) WANEJ 5000

c) BEPS ($\frac{9}{b}$) 6.8

v) DEPS for CFS

EATESH for BEPS 7000
+ S's share of profit.
5000 sh \times 2.94 26460

100 sh \times 2.94 294

a) EATESH for DEPS 33754

b) WANEJ 5000

c) DEPS ($\frac{9}{b}$) 6.7508

- 1) Revise all concepts from Handwritten
- 2) Do solve S.M. Q. from textbook
- 3) Solve volume 3 all Q.