

Q. 1. (1 Mark Each)

- |          |                              |
|----------|------------------------------|
| 1 True   | 1 b. 12.00%                  |
| 2 True   | 2 a. 4 years                 |
| 3 False  | 3 b. Internal rate of return |
| 4 True   | 4 d. Wealth maximisation     |
| 5 False  | 5 d. All of the above        |
| 6 False  | 6 c. Bearer                  |
| 7 True   | 7 d. All of the above        |
| 8 True   | 8 b. Bonus shares            |
| 9 True   | 9 a. Authorised              |
| 10 False | 10 a. Book Closure           |

Q. 2. A Statement showing calculation of Market price per share of Palak's Ltd.

Particulars	Plan A	Plan B	Plan C
EBIT	37,50,000	37,50,000	37,50,000
<b><u>Less: Interest</u></b>			
Existing (20,00,000 x 8%)	1,60,000	1,60,000	1,60,000
New Debentures (50,00,000 x 10%)	-	-	5,00,000
Total	1,60,000	1,60,000	6,60,000
EBT	35,90,000	35,90,000	30,90,000
Less: Tax @ 40%	14,36,000	14,36,000	12,36,000
EAT	21,54,000	21,54,000	18,54,000
<b><u>Less: Preference Dividend</u></b>			
Existing (60,00,000 x 10%)	6,00,000	6,00,000	6,00,000
New Preference shares	-	6,00,000	-
Total	6,00,000	12,00,000	6,00,000
Profit available for equity shareholders	15,54,000	9,54,000	12,54,000
(÷) No of Equity Shares			
Existing	80,000	80,000	80,000
New Equity shares	40,000	-	-
Total	1,20,000	80,000	80,000
Earnings per share	12.9500	11.9250	15.6750
(x) P.E. Ratio	12.00	14.00	10.00
Market price per share	155.40	166.95	156.75
	<b>4.5 Marks</b>	<b>4.5 Marks</b>	<b>4.5 Marks</b>

Plan B will be selected as it has highest Market price per share

1.5 Marks

OR

Q.2. B Calculation of financial EBIT of Futura Ltd.:

EPS Option 1 = EPS Option 2

$$\frac{(EBIT - Interest)(1 - t) - PD}{No. of Share (Option 1)} = \frac{(EBIT - Interest)(1 - t) - PD}{No. of Shares (Option 2)}$$

5 Marks

$$\frac{(x - 0)(1 - 0.40) - 0}{6} = \frac{(x - 5.40)(1 - 0.40) - 0}{1.50}$$

$$\frac{0.6x}{6} = \frac{0.6x - 3.24}{1.50}$$

$$0.15x = 0.6x - 3.24$$

$$0.45x = 3.24$$

$$x = 7.2 \text{ Crores}$$

### Statement of Verification

Particulars	Plan A	Plan B
EBIT	7.20	7.20
Less: Interest	-	5.40
EBT	7.20	1.80
Less: Tax @ 40%	2.88	0.72
EAT	4.32	1.08
Less: Preference Dividend	-	-
Profit available for equity share holders	4.32	1.08
(÷) No of Equity Shares	6.00	1.50
Earnings per share	0.72	0.72
	<b>5 Marks</b>	<b>5 Marks</b>

### Q.3. Genstar Ltd.

Year	Cash inflow	Cumulative cash inflow	Discounting Factor @ 10%	Discounted cash inflow	Cumulative Discounted cash inflow
1	6,00,000	6,00,000	0.9091	5,45,455	5,45,455
2	3,00,000	9,00,000	0.8264	2,47,934	7,93,389
3	2,00,000	11,00,000	0.7513	1,50,263	9,43,652
4	5,00,000	16,00,000	0.6830	3,41,507	12,85,159
5	5,00,000	21,00,000	0.6209	3,10,461	15,95,620
PVCI	21,00,000			15,95,620	
Less: PVCO	10,00,000			10,00,000	
NPV	11,00,000			5,95,620	

a. Payback period:

$$2 + 1 \times \frac{(11,00,000 - 10,00,000)}{2,00,000}$$

$$= 2.5 \text{ years}$$

**3 Marks**

b. Discounted Payback period

$$3 + 1 \times \frac{(10,00,000 - 9,43,652)}{3,41,507}$$

$$3.16 \text{ years.}$$

**3 Marks**

c. Post Payback Profitability =

$$\text{Net Cash Inflow} + \text{Scrap} - \text{Net Cash Outflow}$$

$$21,00,000 - 10,00,000 = 11,00,000$$

**3 Marks**

d. Net Present Value =

$$\text{Present Value of Cash Inflow} - \text{Present Value of Cash Outflow}$$

$$15,95,620 - 10,00,000 = 5,95,620$$

**3 Marks**

e. Profitability Index

$$= \frac{\text{Present Value of Cash Inflow}}{\text{Present Value of Cash Outflow}}$$

$$= \frac{15,95,620}{10,00,000}$$

$$= 15.96$$

**3 Marks**

Q. 3. B. Rashtriya Ltd

Year	NPBDT	Depreciation	NPBT	Tax @ 40%	NPAT	CFAT	CCFAT
1	70,000	20,000	50,000	20,000	30,000	50,000	50,000
2	90,000	18,000	72,000	28,800	43,200	61,200	1,11,200
3	96,000	16,200	79,800	31,920	47,880	64,080	1,75,280
4	78,000	14,580	63,420	25,368	38,052	52,632	2,27,912
5	62,000	13,122	48,878	19,551	29,327	42,449	2,70,361
6	50,000	11,810	38,190	15,276	22,914	86,687	3,57,048
6	WDV		1,06,288	42,515	63,773		
			(Scrap + Loss)				

a. Payback period: 5 Marks

$$3 + 1 \times \frac{(2,00,000 - 1,75,280)}{52,632}$$

$$= 3.47 \text{ years}$$

b. Payback Profitability = 5 Marks

$$\text{Net Cash Inflow} + \text{Scrap} - \text{Net Cash Outflow}$$

$$2,11,373 + 20,000 - 2,00,000 = 31,373$$

c. Average rate of return: 5 Marks

$$= \frac{\text{Average Net Profit After Tax}}{\text{Average Investment}} \times 100$$

$$\text{Average Net Profit} = \frac{(30,000 + 43,200 + 47,880 + 38,052 + 29,327 + 22,914)}{6}$$

$$\text{Average Net Profit} = 35,228$$

$$\text{Average Investment} = \left( \frac{\text{Cost of Investment} - \text{Scrap Value}}{2} \right) + \text{Scrap Value} + \text{Average Working Capital}$$

$$\text{Average Investment} = \frac{(2,00,000 - 20,000)}{2} + 20,000 + 0$$

$$\text{Average Investment} = 90,000 + 20,000 + 0 = 1,10,000$$

$$\text{A.R.R.} = \frac{35,228}{1,10,000} \times 100$$

$$\text{A.R.R.} = 32.03\%$$

Q. 4. A

WACC of Oreo Ltd. based on Market Value

[07 Marks]

Particulars	Market Value (₹)	Weights	Specific Cost (%)	WACC
Public Deposit	65,000	0.22	10	2.17
Preference Shares	40,000	0.13	12	1.60
Equity Shares	1,95,000	0.65	15	9.75
	3,00,000	1		13.52

WACC of Oreo Ltd. based on Book Value

[08 Marks]

Particulars	Book Value (₹)	Weights	Specific Cost (%)	WACC
Public Deposit	70,000	0.28	10	2.80
Preference Shares	30,000	0.12	12	1.44
Equity Shares	1,00,000	0.40	15	6.00
Retained Earnings	50,000	0.20	15	3.00
	2,50,000	1		13.24

Q. 4. B. 1 Axles Ltd.

8 Marks

Source	Amount	Weights	Cost of Capital	Weight x Cost of Capital
Debt	1,250	0.25	9.6	2.4
Equity	3,750	0.75	20	15
	5,000	1		17.4

Economic Value Added = Net Operating Profit After Tax – WACC x Capital Employed  
 = Capital Employed x ROCE (1 – t) - WACC x Capital Employed  
 = 5,000 x 25% (1 – 0.40) – 17.4 x 5,000  
 = 750 – 870  
 = -120

Q. 4. B. 2 Effective Rates

7 Marks

E.R. =  $\left[1 + \frac{r}{m}\right]^{n \times m} - 1$

a. Yearly =  $\left[1 + \frac{0.12}{1}\right]^{1 \times 1} - 1$  1 Mark  
 = 1.12 – 1  
 = 0.12 x 100  
 = 12%

b. Half Yearly =  $\left[1 + \frac{r}{m}\right]^{n \times m} - 1$  2 Marks  
 =  $\left[1 + \frac{0.12}{2}\right]^{1 \times 2} - 1$   
 =  $[1 + 0.06]^2 - 1$   
 =  $[1.06]^2 - 1$   
 = 1.1236 – 1  
 = 0.1236  
 = 12.36

c. Quarterly =  $\left[1 + \frac{r}{m}\right]^{n \times m} - 1$  2 Marks  
 =  $\left[1 + \frac{0.12}{4}\right]^{1 \times 4} - 1$   
 =  $[1 + 0.03]^4 - 1$   
 =  $[1.03]^4 - 1$   
 = 1.1255 – 1  
 = 0.1255  
 = 12.55

d. Monthly =  $\left[1 + \frac{r}{m}\right]^{n \times m} - 1$  2 Marks  
 =  $\left[1 + \frac{0.12}{12}\right]^{1 \times 12} - 1$   
 =  $[1 + 0.01]^{12} - 1$   
 =  $[1.01]^{12} - 1$   
 = 1.1268 – 1  
 = 0.1268  
 = 12.68

Q. 5. Marks to be given based on concept