27TH COMPREHENSIVE EXAMINATION – NOVEMBER 2013

Marks

CASE # 1

(a) Earnings per share (EPS) after financing: Rupees

	Ordinary Share	Debt	Preferred Stock	Marks
EBIT (Earnings before interest and taxes)	6,000,000	6,000,000	6,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	550,000	–	
Profit before taxes	5,200,000	4,650,000	5,200,000	
Taxes (35%)	1,820,000	1,627,500	1,820,000	
Profit after taxes	3,380,000	3,022,500	3,380,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	500,000	
Earnings available to ordinary shareholders	3,380,000	3,022,500	2,880,000	
No. of ordinary shareholders	2,700,000	2,200,000	2,200,000	
EPS (Earnings per share)	1.25	1.37	1.31	5

Earnings per share (EPS) when EBIT is Rs.3 million: Rupees

	Ordinary Share	Debt	Preferred Stock	Marks
EBIT	3,000,000	3,000,000	3,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	550,000	–	
Profit before taxes	2,200,000	1,650,000	2,200,000	
Taxes (35%)	770,000	577,500	770,000	
Profit after taxes	1,430,000	1,072,500	1,430,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	500,000	
Earnings available to ordinary shareholders	1,430,000	1,072,500	930,000	
No. of ordinary shareholders	2,700,000	2,200,000	2,200,000	
EPS	0.53	0.49	0.42	5

Earnings per share (EPS) when EBIT is Rs.4 million: Rupees

	Ordinary Share	Debt	Preferred Stock	Marks
EBIT	4,000,000	4,000,000	4,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	550,000	–	
Profit before taxes	3,200,000	2,650,000	3,200,000	
Taxes (35%)	1,120,000	927,500	1,120,000	
Profit after taxes	2,080,000	1,722,500	2,080,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	500,000	
Earnings available to ordinary shareholders	2,080,000	1,722,500	1,580,000	
No. of ordinary shareholders	2,700,000	2,200,000	2,200,000	
EPS	0.77	0.78	0.72	5

Marks

Earnings per share (EPS) when EBIT is Rs.8 million: Rupees

	Ordinary Share	Debt	Preferred Stock	
EBIT	8,000,000	8,000,000	8,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	550,000	–	
Profit before taxes	7,200,000	6,650,000	7,200,000	
Taxes (35%)	2,520,000	2,327,500	2,520,000	
Profit after taxes	4,680,000	4,322,500	4,680,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	500,000	
Earnings available to ordinary shareholders	4,680,000	4,322,500	4,180,000	
No. of ordinary shareholders	2,700,000	2,200,000	2,200,000	
EPS	1.73	1.96	1.90	5

(b) (i) Earnings per share (EPS) when interest rate on new debt were 8% and the preferred stock dividend rate were 7%: Rupees

	Ordinary Share	Debt	Preferred Stock	
EBIT	6,000,000	6,000,000	6,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	400,000	–	
Profit before taxes	5,200,000	4,800,000	5,200,000	
Taxes (35%)	1,820,000	1,680,000	1,820,000	
Profit after taxes	3,380,000	3,120,000	3,380,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	350,000	
Earnings available to ordinary shareholders	3,380,000	3,120,000	3,030,000	
No. of ordinary shareholders	2,700,000	2,200,000	2,200,000	
EPS	1.25	1.42	1.38	5

(ii) Earnings per share (EPS) when ordinary share could be sold for Rs.20 per share: Rupees

	Ordinary Share	Debt	Preferred Stock	
EBIT	6,000,000	6,000,000	6,000,000	
Interest on existing debt	800,000	800,000	800,000	
Interest on new debt	–	550,000	–	
Profit before taxes	5,200,000	4,650,000	5,200,000	
Taxes (35%)	1,820,000	1,627,500	1,820,000	
Profit after taxes	3,380,000	3,022,500	3,380,000	
Dividends on existing preferred stock	–	–	–	
Dividends on new preferred stock	–	–	500,000	
Earnings available to ordinary shareholders	3,380,000	3,022,500	2,880,000	
No. of ordinary shareholders	2,450,000	2,200,000	2,200,000	
EPS	1.38	1.37	1.31	5

Marks

CASE # 2

(a) Skill Limited
Flexible Budget at 85% Activity

	Workings	Rupees	Marks
Variable Cost:			
Direct materials	(1)	2,772,112	
Direct wages	(2)	4,713,898	
Variable production overhead	(3)	979,168	
Variable selling and distribution overhead	(4)	139,881	
		8,605,059	2
Fixed Costs:			
Fixed production overhead	(3)	660,231	
Fixed selling and distribution overhead	(4)	322,532	
Administration overhead		264,000	
		1,246,763	2
Total cost		9,851,822	1
Sales	(5)	11,822,234	
Profit		1,970,412	1
Contribution margin		5,832,947	2

Workings:

W-1: Direct Materials:

Expected price change	= 6%		
Increase in cost at 85%	= (Rs. 2,307,600 + Rs. 307,600) x 1.06	= Rs. 2,772,112	2

W-2: Direct Wages:

Incremental cost	= Rs. 538,300		1
Increase in cost at 85%	= (Rs. 4,038,300 + Rs. 538,300) x 1.03	= Rs. 4,713,898	1

W-3: Fixed and Variable Production Overheads:

Incremental cost	= Rs. 107,660		½
Per 10% increment capacity	= 8.5 (85 x 10%)		½
Variable costs at 85% capacity	= Rs.107,660 x 8.5	= Rs. 915,110	½
	= Rs.915,110 x 1.07 price increase	= Rs. 979,168	½
Fixed cost element before price increase	= {Rs.1,407,660 total cost at 75% capacity} – {Variable cost 7.5 (75 x 10%) x Rs. 107,660 = Rs. 807,450}		½
	= Rs.1,407,660 – Rs. 807,450	= Rs. 600,210	½
Estimated fixed cost	= Rs. 600,210(1.10)	= Rs. 660,231	1

Marks

W-4: Fixed Selling and Distribution Overhead:

			Marks
Incremental cost	= Rs. 15,380		½
Variable costs at 85%	= Capacity are predicted to be 8.5 x Rs. 15,380 (1.07 inflation factor)		
		= Rs. 139,881	½
Fixed cost element before price increase	= {Rs.415,380 total cost at 75% capacity} – {Variable cost 7.5 (75 x 10%) x Rs. 15,380 = Rs. 115,350}		1
	= Rs.415,380 – Rs. 115,350	= Rs. 300,030	1
Predicted fixed cost	= Rs. 300,030(1.075)	= Rs. 322,532	1

W-5: Sales:

			Marks
Total cost	= (Rs.9,851,822) x 100 ÷ 83.333	= Rs. 11,822,234	1

(b) Problems that can arise from a change in capacity level include:

- Step increase in fixed costs to enable output to be expanded. 1
- Inability to sell the increased output resulting in an increase in stocks. 1
- Working the plant more intensively might result in bottlenecks and machine breakdowns and this may result in an increase in unit variable costs because of diminishing returns to scale. 2

(c) Members of a Budget Committee:

The budget committee should consist of high level executives who represent the major segments of the business. For example, the committee might consist of the chief executive (or his/ her deputy), the production manager, the marketing manager, the management accountant and the human resource manager. 3

Purpose of a Budget Committee:

Its major task is to communicate the long-term objectives of the organization, ensure that the budgets are realistically established and that they are coordinated satisfactorily. 2

THE END