

June 21, 2003

**SPECIFIED PAPER OF - ADVANCED ACCOUNTING & FINANCIAL REPORTING;
MANAGEMENT ACCOUNTING; BUSINESS FINANCE DECISIONS (MARKS 100)
(3 hours)**

Q.1 Messrs Orient Limited a listed company, is engaged in the manufacturing of surgical products. The key financial data for the years ended June 30, 2001 and 2002 is as follows:

	2002	2001
	(Rs. in 000)	
Share capital	1,430	1,430
Reserves	34,011	8,370
Long-term loans - Long term portion	9,500	14,250
- Short term portion	4,750	4,750
Liability against assets subject to finance leases - long term	1,850	11,600
- current	9,750	13,300
Short term running finances	19,100	79,200
Creditors, accrued and other liabilities	59,109	22,500
Dividends	<u>3,500</u>	<u>5,600</u>
	<u>143,000</u>	<u>161,000</u>
Fixed assets	27,300	24,700
Long-term investments	29,500	7,000
Deferred tax	1,000	—
Stores & spares	2,700	4,300
Stock-in-trade	23,000	19,000
Trade debts	21,800	32,700
Other receivable s	4,000	6,500
Taxation	1,700	2,800
Cash & bank balances	<u>32,000</u>	<u>64,000</u>
	<u>143,000</u>	<u>161,000</u>
Sales	136,500	106,000
Cost of goods sold	<u>(109,100)</u>	<u>(84,800)</u>
	27,400	21,200
Administrative and marketing expenses	(11,000)	(10,200)
Depreciation	(9,000)	(5,000)
Financial charges	(2,400)	(3,000)
Other income	<u>2,000</u>	<u>1,000</u>
	7,000	4,000
Taxation including deferred tax	<u>(2,000)</u>	<u>(1,000)</u>
	5,000	3,000
Unappropriated profit brought forward	<u>1,000</u>	<u>500</u>
Profit available for appropriation	<u>6,000</u>	<u>3,500</u>

Additional information:

1. Following appropriations were made during the year 2002 (Rupees in thousands):
 - Transfer to General Reserve Rs. 2,405 (2001 : Rs. 1,785)
 - Issue of bonus shares @ 20% (2001 : nil)
 - Final dividend @ 130% (2001 : @ 50%)
2. The reserves of the company as of July 1, 2000 comprise of Capital Reserve Rs. 585, General Reserves Rs.5,000 and unappropriated profit Rs.500.
3. In pursuance of adoption of IAS-39 the company has recognized an unrealized gain on its long term investments held as 'Available for Sale', amounting to Rs.22,500 during the current year, including Rs.7,500 for the period upto June 30, 2001.
4. The company, effective from current year, has started recognizing deferred tax debit balance in compliance of IAS-12.
5. The company accrues all financial charges at the end of each year.

Required:

- (a) In pursuance of change in accounting policies, draft policies for:
 - Deferred taxation (02)
 - Long term investments – Available for Sale (04)
- (b) Prepare cash flow statement (under indirect method) for the year ended June 30, 2002. (07)
- (c) Prepare statement of changes in equity for the year ended June 30, 2002 (07)

Q.2 From the following information prepare a note on 'Financial Instruments' in accordance with the disclosure requirements of IAS-32

	Rs. in 000
Tangible fixed assets	300,550
Long term – Deposits (carrying interest @ 6%)	7,500
Prepayments	2,400
Long-term loans to employees – due after one year (interest 5%)	2,950
Trade debts	70,450
Stock-in-trade	150,300
Deposits (without interest)	5,300
Sales tax refundable	15,400
Cash and bank balances	75,350
Long-term loans from banks (interest @ 4%)	150,000
Staff retirement benefits	1,250
Short-term running finance (mark up 5% to 7.5%)	83,550
Creditors accrued and other liabilities	175,250
Taxation	45,000
Proposed dividend	22,000

(06)

(3)

- Q.3 Excerpts from the financial statements of M/s Paramount Limited for the year ended 2002 and 2003 show:

	2003	2002
-No. of ordinary shares of Rs. 10 each	1,100,000	1,000,000
-Net profit after tax	Rs. 20,000,000	14,000,000

On January 1, 2003 the company made a Right Issue at par. One right share for every 10 ordinary shares.

Market price of shares prevailing at the time of right issue was Rs. 12.

Required:

Calculate 'Earnings per share' for the two years. (06)

- Q.4 (a) The Queen Company operates funded defined gratuity and pension schemes for all of its permanent employees. The following information is available with regard to these funds:

	Gratuity Fund Rs.	Pension Fund Rs.
Closing net liability at the end of year 1	628,000	476,000
Total cost for the year	5,599,000	840,000
Contribution paid by the company	5,487,000	841,000
Present value of defined benefit obligation	6,190,000	5,699,000
Fair value of plan assets	1,923,000	7,701,000

Required:

From the above information for both the funds work out:

- Closing net liability/asset position as at the end of year 2 (02)
- Unrealized actuarial gains/(losses) for year 2 (02)

- (b) Explain the following terms in the light of IAS – 19

- Termination benefits (01)
- Defined benefit plan (01)
- Short-term employee benefits (01)
- Multi-employer plans (01)

- Q.5 Mian Limited produces and distributes a wide variety of sports goods. One of its divisions, the Squash Division, produces and sells "rackets" which are very popular with squash players. The demand for these rackets is relatively insensitive to price changes. The Squash Division is considered to be an investment center and in recent years has averaged a return on investment of 20%. The following data are available for the Squash Division and its product:

Total annual fixed costs	Rs.2, 000,000
Variable cost per racket	Rs.600
Average number of rackets sold each year	20,000
Total operating assets invested in the division	Rs.3, 200,000

Required:

- (a) What is the minimum selling price per unit that the Squash Division could charge for the division manager to get a favourable performance rating? Management considers an ROI below 20% to be unfavourable.
- (b) Assume that Mian Limited judges the performance of its investment center management based on residual income rather than ROI, as was assumed in requirement (a). The company's minimum acceptable earning rate is considered to be 15%. What is the minimum selling price per unit that the Squash Division should charge for the division manager to receive a favourable performance rating? **(03)**

Q.6 Sumar Limited is a fishing company based in Gadani. It has three divisions:

- **Surmai Harvesting:** operates a fleet of 10 trawlers
- **Surmai Processing:** processes the raw surmai into surmai fillets
- **Surmai Marketing:** packages surmai fillets in 2-kilogram packets that are sold to wholesale distributors at Rs.60 each

The Surmai Processing Division has a yield of 500 kilograms of processed surmai fillets from 1,000 kilograms of raw surmai provided by the Surmai Harvesting Division. The Surmai Marketing Division has a yield of three hundred 2-kilogram packets from every 500 kilograms of processed Surmai provided by the Surmai Processing Division. (The weight of the packaging material is included in the 2-kilogram weight). Cost data for each division follow:

Surmai Harvesting Division

Variable costs per kilogram of raw surmai	Rs. 1.00
Fixed costs per kilogram of raw surmai	Rs. 2.00

Surmai Processing Division

Variable costs per kilogram of processed surmai	Rs. 4.00
Fixed costs per kilogram of processed surmai	Rs. 3.00

Surmai Marketing Division

Variable costs per 2-kilogram packet	Rs. 1.50
Fixed costs per 2-kilogram packet	Rs. 3.50

Fixed costs per units are based on the estimated volume of raw surmai, processed surmai, and 2-kilogram packets to be produced during the current fishing season. Sumar Limited has chosen to process internally all raw surmai bought in by the Surmai Harvesting Division. Other surmai processors in Gadani purchase raw surmai from boat operators at Rs.5 per kilogram. Sumar Limited has also chosen to process internally all surmai fillets into the 2-kilogram packets sold by the Surmai Marketing Division. Several fish-marketing companies in Gadani purchase surmai fillets at Rs.25 per kilogram.

Required:

- (a) Compute the overall operating income to Sumar Limited of harvesting 1,000 kilograms of raw surmai, processing it into surmai fillets, and then selling it in 2-kilogram packets. **(04)**

- (b) Compute the transfer prices that will be used for internal transfer from the Surmai Harvesting Division to the Surmai Processing Division and (ii) from the Surmai Processing Division to the Surmai Marketing Division under each of the following transfer-pricing methods:
- (i) 200% of variable cost: Variable cost is the cost of the transferred-in product (if any) plus the division's own variable cost (02)
 - (ii) 150% of full cost: full cost is the cost of the transferred-in product (if any) plus the division's own variable and fixed cost (02)
 - (iii) Market price. (02)

Q.7 Ittehad Engineering, based in Lahore, is a large supplier to the Power Development Corporation. Until recently, it had experienced a high success rate in bidding on power generation components. Last year it lost a bid on the power system (PT999) for a new power plant of the Corporation. The successful bidder was a Sialkot company (Puma Limited) that also had an existing contract with the Coastal Development Agency; this Coastal Development Agency contract was for a production run of sixteen PT999 systems. Ittehad Engineering had manufactured only one PT999 system to date; 8,000 direct labor hours were required to manufacture this one unit. Based on prior contracts for power systems, Ittehad Engineering believe an 85% cumulative average-time learning model for labor hours applied to PT999 systems.

The cost structure of Ittehad Engineering for each PT999 was built up as the sum of direct costs and indirect costs:

- Direct materials cost per PT999 unit: Rs.180,000
- Direct labor cost: number of direct labor hours per PT999 unit x Rs.60 an hour
- Indirect procurement costs: 30% of direct materials cost
- Indirect assembly costs; number of direct labor hours x Rs.80 an hour

Analysts within Ittehad Engineering believe that Puma's direct materials cost would be the same as for Ittehad. They, however, highlight two areas where Puma Limited had an advantage when bidding on the contract:

1. Puma had already assembled sixteen units for another contract. Ittehad Engineering analysts believe that Puma had an 85% cumulative average-time learning model for labor hours, with 8,000 direct hours required for the first PT999 system to be assembled.
2. Puma had direct labor cost of Rs.50 per hour, Ittehad Engineering analysts believe that Puma had procurement indirect cost rate of 30% of direct materials cost and an assembly indirect cost of Rs.80 per direct labor hour.

Required:

1. Estimate the number of direct labor hours required by Ittehad Engineering to assemble the first sixteen PT999 systems. (This first sixteen includes the one system already manufactured). (02)
2. What cost figure did Ittehad Engineering use in developing its bid for a production run of sixteen PT999 systems? (Assume it based its bid on the initial production run of

3. What cost figure would the Ittehad Engineering analysts have estimated for competitor Puma assembling the additional sixteen units for the Power Development Corporation, given (a) that Puma had completed the contract of sixteen PT999 systems for the Coastal Development Agency and (b) that Puma had the lower direct cost per hour?

(04)

Q.8

ABC Company (Private) Limited
Balance Sheet
31 December 2002

Rupees in 000's

750,000 Ordinary Shares of Rs. 100 each	75,000	
Retained Earnings	<u>11,150</u>	
	86,150	
Long term loans	<u>150,000</u>	
	<u>236,150</u>	
Fixed Assets:		
Freehold premises	92,000	
Plant and Machinery	<u>154,950</u>	
	246,950	
Investments (market value Rs. 54,600)	<u>46,800</u>	
	293,750	
Current Assets:		
Inventories		
Raw materials	10,100	
Work in process	5,600	
Finished goods	<u>10,200</u>	25,900
Debtors	53,600	
Cash and bank balances	<u>2,975</u>	82,475
		376,225
Current Liabilities:		
Creditors	103,300	
Provision for taxation	18,025	
Dividend payable	<u>18,750</u>	
		<u>(140,075)</u>
		<u>236,150</u>

(7)

ABC Company (Private) Limited
Profit and Loss Account
For the year ended 31 December 2002

Trading Profit		86,400
Investment income		<u>2,600</u>
		89,000
Less: Director's remuneration	25,000	
Depreciation	15,200	
Interest charges	<u>9,000</u>	49,200
		39,800
Provision for taxation		<u>18,025</u>
		21,775
Proposed dividend (25%)		<u>18,750</u>
		3,025
Balance brought forward 31 December 2001		<u>8,125</u>
		<u>11,150</u>

The sales have been steadily increasing in a widening market and for the current year have reached Rs. 630,000,000. Orders are now being refused although there is additional production capacity available, as the company is not financially strong enough to undertake further business.

Required:

You are required to (a) list the items of particular relevance to the company's position (b) the conclusions to be drawn from them and (c) recommendations which may be made as future policy of the company. (15)

Q.9 Big Oil Ltd. is wondering whether to drill for oil in the field. The prospects are as follows:

Depth of Well (Feet)	Total Cost Rs in millions	Cumulative Probability of of Finding Oil	PV of Oil (if Found) Rs in millions
1,000	200	0.5	500
2,000	250	0.6	450
3,000	300	0.7	400

How deep should it be prepared to drill?

(10)

(8)

Q.10 Sun Rise Company is implementing a new sales model (project ULTRA) which will bring growth to the company. ULTRA requires initial outflow of Rs. 160 millions. The estimates for the yearly running cost of ULTRA are as follows:

Salaries and allowances	Rs. 20,000,000
Distribution expenses	Rs. 5,000,000
Others	Rs. 2,000,000

Other relevant information is as follows:

- Company sold 192,318 tons during 2002 having net sales of Rs. 17,761,327,000
- Gross profit is 24% of net sales
- Administration and selling cost is 40% of gross profit
- Total No. of Distributors Sales Representatives are 2024
- Productivity level of DSRs is 65%

The company expects two percent increase in DSRs productivity every year up to five years. Calculate the payback period for ULTRA. The cost of capital is 10%.

(10)

(THE END)