QUESTION 2 **53 marks**

Izinkuni Ltd ('Izinkuni') produces wood pulp and office paper. Izinkuni's chief financial officer (CFO) approached you for advice on the company's long-term special order, transfer pricing arrangements and staff incentive scheme.

1 Background on the manufacture of pulp

Wood pulp is wood fibre used to manufacture paper. The main raw material used to produce wood pulp, is wood. The wood is delivered in the form of logs (i.e. the tree trunks that have the bark on it). The logs are debarked and chipped into small pieces. The chips are then cooked in a mixture of water and chemicals to remove the glue that holds the wood fibres together and to form the wood pulp. Thereafter the wood pulp is removed, washed and dried. Once dried, the wood pulp is bleached, cut into square sheets, baled, wrapped and dispatched to customers.

2 Background on the manufacture of paper

Wood pulp and/or recycled paper are the key raw materials used in the manufacture of paper. Should a company choose to make use of recycled paper, it would be necessary to chemically remove adhesives and ink from the paper before using it in the manufacturing process. The recycled paper is then shredded and mixed with wood pulp and water. A mixture of either only wood pulp and water (if no recycled paper is used) or alternatively a mixture of wood pulp, recycled paper and water, is sprayed onto a constantly moving wire mesh that turns the pulp mixture into a continuous web of paper and removes excess water. The paper web first passes through a press to squeeze out more water and then through a series of heated cylinders that dries the web into a continuous sheet of paper. The paper sheet next passes through a cutting machine where it is cut into the required sizes, and then it is packaged and dispatched.

3 Divisional structure and staff incentive scheme

Izinkuni has a divisional structure with two operating divisions and one support division. The operating divisions consist of the Pulp Division and the Paper Division. Each operating division has a divisional manager who reports to an executive management team made up of the Chief Executive Officer (CEO), Chief Operating Officer (COO) and the CFO.

The Pulp Division manufactures wood pulp as described above and sells the pulp to external customers and transfers pulp internally to the Paper Division. The divisional managers have full autonomy over setting transfer prices.

The Paper Division manufactures paper that is used for office printing and photocopying across Africa. This division manufactures one type of office paper that has developed a reputation for its reasonable price and good quality that is suitable for use in laser printers, ink-jet printers and photocopiers.

The Support Division provides senior management services and administrative support services to the operating divisions.

Izinkuni operates a staff incentive scheme in terms of which a bonus pool is made available to each operating division, provided that the division in question and the company have met their budgeted profit before tax targets. For divisions qualifying for the bonus, the amount included in the bonus pool is calculated using the following formula: 25% x (actual profit before tax – budgeted profit before tax). Bonuses are allocated to the Support Division and executive directors on a discretionary basis.

4 2019 budgets

Following significant input and participation from the COO and divisional managers, the CFO prepared the following abridged budget for the financial year ending 30 June 2019 (FY2019):

Abridged FY2019 budget				
	Notes	Pulp Division	Paper Division	Company
		R'000	R'000	R'000
Sales	4.1	4 612 400	3 870 000	6 470 000
Variable costs	4.1, 4.2	(2 175 500)	(2 173 650)	(2 336 750)
Contribution		2 436 900	1 696 350	4 133 250
Divisional fixed manufacturing costs		(1 374 000)	(464 400)	(1 838 400)
Other directly attributable divisional fixed costs		(160 300)	(90 300)	(250 600)
Divisional operating profit before taxation		902 600	1 141 650	2 044 250
Support Division costs				(250 000)
Profit before taxation	4.3			1 794 250

Notes

4.1 Company revenue and variable costs have been arrived at after the elimination of interdivisional sales and purchases of 516 000 tonnes of wood pulp at an average price of R3 900 per tonne. The relevant amount is included in the sales figure of the Pulp Division and the variable cost figure of the Paper Division.

The Pulp Division has budgeted to sell 400 000 tonnes of wood pulp to external customers at an average selling price of R6 500 per tonne. The Paper Division has budgeted to sell 258 000 tonnes of paper.

4.2 A breakdown of the budgeted variable cost per tonne of finished product in each division is as follows:

FY2019 budgeted variable costs per tonne	Notes	Pulp Division	Paper Division
		R	R
Wood	4.2.1	1 700	–
Wood pulp	4.2.2	–	7 800
Water		250	250
Chemicals		200	150
Variable manufacturing overheads		225	225
		2 375	8 425

4.2.1 The Pulp Division purchases all its wood from sustainably managed forests as part of the company's efforts to be a responsible corporate citizen.

4.2.2 Currently the paper manufactured by the Paper Division does not include any recycled paper and therefore the main raw material is wood pulp.

4.3 Opening, work-in-progress and closing inventories are insignificant and can be ignored.

5 Long-term special order

After the finalisation and approval of the budget, the Paper Division's manager received a sales enquiry from a potential new customer, Bongo Promotions and Publishers (Pty) Ltd ('Bongo'). Bongo requested a quote for the supply of 75 000 tonnes of high quality coated printing paper per annum for the next five years. Bongo has suggested the following terms for the order:

- Each sheet of paper must contain exactly 30% of recycled paper;
- The supply of the 75 000 tonnes would commence on 31 July 2018; and
- A fixed price is to be determined for the first year of the contract. Thereafter the price would be re-negotiated annually based on inflationary increases observed in the pulp and paper industry in the preceding year.

The special order would have the following annual financial implications:

Cost implications of the special order	**Notes**	
Wood pulp required (tonnes)		105 000 tonnes
Internal transfer price (R per tonne)	5.1	To be agreed
External market price (R per tonne) (normal)	5.1	R6 500
External market price (R per tonne) (discounted)	5.2	R5 000
Recycled paper required		45 000 tonnes
Cost per tonne		R500
Variable costs per tonne of finished product – Paper Division		
Water		R250
Chemicals	5.3	R450
Manufacturing overheads	5.5	R225
Other costs		
New machinery	5.4	R75 million
Repairs and maintenance	5.5	?

Notes

5.1 The Pulp Division currently has 84 000 tonnes of spare capacity per annum and it has indicated that it will not be feasible to increase its production capacity during the next five years. Given these capacity constraints, the Pulp Division proposes that any wood pulp manufactured and transferred to the Paper Division over and above the current annual 516 000 tonnes should be at the full external market price of R6 500 per tonne.

Apart from the impact of any potential opportunity costs, additional wood pulp required by the Paper Division will not impact the Pulp Division's current variable costs per unit or total fixed costs.

5.2 This cost is based on a quote received from one of the Pulp Division's competitors who indicated that they have spare capacity and would therefore be able to supply the Izinkuni Paper Division with the additional wood pulp it would need at a significant discount.

5.3 This cost includes the chemicals required to de-ink the paper for recycling and coating both sides of the final paper product.

5.4 The Paper Division has sufficient spare capacity to fulfil the order, but will need to invest in new de-inking and coating machinery costing R75 million. This machinery could be sold at the end of five years for R7 500 000.

5.5 Repairs and maintenance costs are included in the Paper Division's variable and fixed manufacturing overheads. In the past it has been noted that the fixed element of these costs is a step fixed cost. The split between the fixed and variable portion can reliably be estimated using the following cost-volume data (this data excludes the impact that the new de-inking and coating machinery may have on repairs and maintenance costs):

Repairs and maintenance costs	
Volume	**Total cost**
Tonnes produced by the Paper Division	**R'000**
100 000	13 000
200 000	15 500
300 000	18 000
400 000	27 000

5.6 Should the Paper Division not accept the special order, it will be able to reduce its fixed costs by an amount of R25 million per annum over the next five years.

5.7 The Paper Division requires an operating profit margin of at least 25% on the special order.

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QUESTION 2 – REQUIRED		**Marks**	
		Sub-total	**Total**
(a)	Calculate, with supporting reasons, the minimum price that the Paper Division should charge for the special order in FY2019. Assume that the Paper Division purchases all the wood pulp it requires for the special order from the external supplier.	13	13
(b)	Recommend a range of transfer prices between the Pulp and Paper divisions, on the assumption that the Paper Division negotiates a price of R11 500 per tonne for the special order in FY2019 and sources all the wood pulp required for the special order from the Pulp Division. *Communication skills – presentation and layout*	11 *1*	12
(c)	Discuss the key factors that the management team of Izinkuni should consider in evaluating the potential special order. *Communication skills – clarity of expression*	15 *1*	16
(d)	Critically evaluate Izinkuni's current staff incentive scheme. *Communication skills – logical argument*	11 *1*	12
TOTAL FOR THE QUESTION			**53**