This is just a rough outline with some of the points to consider. Not all points are included. For exam purposes you would want to carefully develop your best thoughts in each section.

Zumwald

Issues

- Pricing dispute between managers
- Should Fettinger (managing director) intervene?
- Does the current MCS align the interests of the managers with the interests of the owners?
- Should the company revise their MCS?

Background

located in Germany; produces medical diagnostic imaging systems & equipment
6 divisions; 3 involved in the dispute

ISD - sells high-end units to external customers
Heidelberg - sells monitors, controlls, subsystems: 50% external - 50% internal; 70% capacity
ECD - sells application-specific circuits; external & internal sales; profit centre; 90 % capacity
    Internal transfer price of cost + 20% designed to motivate ECD to internal transactions

STRENGTHS: Solid reputation; stable company; good profits; $3B in annual sales
WEAKNESSES: Internal transfer prices may lead to suboptomization; internal quarrelling; loss of sales
OPPORTUNITIES: New sales order
THREATS: Global business slowdown; excess capacity available
There may be others; these are just a sample

KSF's

- Return on Invested Capital (ROIC)
- Meeting targeted budgets
- Sales growth (What is the relationship between quality and sales growth?)
- Quality; innovation

Current MCS

6 Divisions
Highly decentralized; considerable autonomy IF PERFORMANCE IS ON TARGET
Return on Invested Capital - and sales growth

ECD = profit centre; Heidelberg & ISD = investment centres (ROIC)

Transfer pricing rule: can source from external suppliers if it helps meet targets; freedom to choose

ECD - Internal transfer price of cost + 20% designed to motivate ECD to internal transactions
    Bauer - says if he is forced to purchase internally it will jeopardize his ability to
    obtain serious quotes from external vendors; freedom to chose is imperative

Current Conflict

3 quotes received: Heidelberg - $140,000; Bogardus - 120,500; Display Technologies - 100,500
Display Technology is lowest; but is unproven in market. Quality is unknown -
    bidding low to try to capture market share
    May offer low price to get customer; then raise, as may not be able to
    maintain low price and acceptable quality. If others can't, how can they offer such a low price?

Deal is less than 5% of revenue for each of the divisions

Heidelberg had helped design X73; but had only been reimbursed for costs - no profit made
    took their time & resources, but left them at nil change

If Heidelberg got order, would buy components from ECD.

Each department wants to charge standard markup; but Heidelberg & ECD are not
    operating at capacity; could other departments lower their profit margins
    in order to "get the business" from ISD? Is a smaller margin better than NO margin when operatir

FINANCIAL ANALYSIS:

If full transfer prices were used:	**ECD**	**Heidelberg**	**ISD**	**Zumwald**
Revenue or Transfer Price	21,600	140,000	340,000	
Variable Costs	9,000	28,400	72,000	
		21,600	26,300	
			140,000	
Gross Margin (profit if fixed costs are ignored)	12,600	90,000	101,700	204,300
Fixed Costs	9,000	55,000	117,700	
Profit	**3,600**	**35,000**	**(16,000)**	**22,600**

If purchased from Display Technologies	**ECD**	**Heidelberg**	**ISD**	**Zumwald**
Revenue or Transfer Price	0	0	340,000	
Variable Costs	0	0	72,000	
		0	26,300	
			100,500	
Gross Margin (profit if fixed costs are ignored)	0	0	141,200	141,200
Fixed Costs	9,000	55,000	117,700	
	fixed costs that	fixed costs that		
	may not be eliminate	ay not be eliminated		
Profit	**(9,000)**	**(55,000)**	**23,500**	**(40,500)**
Profit variance	**(12,600)**	**(90,000)**	**39,500**	**(63,100)**

Is this variance material??? Could something be done to help equalize impact to each division?

Recommendations

Evaluate centralized vs. decentralized

Evaluate responsibility centres

Evaluate transfer pricing policy

What would you change, how would you change them, and why. What are the strengths of your changes, an
might they cause? Will the solve the real problem?

Would you add any new components to the MCS that are not currently in use?

Should Fettinger interviene? If so, in what way? Is there an effective way for him to be involved?
Could insistent on internal transfer
This deal is less than 5% of overall annual revenue
Could intervene by providing training and assistance in how to settle the dispute.
Could do some number crunching with the managers to ensure they understand the overall impact
Could restructure the departments in a different way to minimize suboptimization
May jeopardize manager's autonomy and ability to transact in good faith with external suppliers
If Fettenger intervenes in this small matter, what might he do in better ones;
may defeat the purpose of the control systems

These are just some rough points that could be used to present your position on how to solve the issues at Zu

End with, fully developed recommendations that include the strengths and weaknesses of the current plan and recommendations. This is the place to really focus on applying all of the things you learned in this section of the course.