

Roll No.

Total No. of Questions – 6

Total No. of Printed Pages – 24

Time Allowed – 3 Hours



Maximum Marks – 100

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Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

Question No. 1 is compulsory.

Candidates are also required to answer any **Four** questions from the remaining **Five** questions.

Working Notes should form part of the respective answers.

No Statistical or other tables will be provided with this question paper.

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1. Style Activewear is one of the largest a sports and athleisure brand that is involved in the design, development, manufacturing and marketing and sales of apparel, footwear, accessories, equipment, and services.

Mission : “To bring inspiration and innovation to every athlete in the country.”

We champion continual progress for athletes and support by taking action to help athletes reach their potential. This is achieved by our drive product innovation for athletes everywhere. Countless ideas are tested in pursuit of aiding performance, injury risk reduction, enhancing perception and feel, and delivery of innovative products to athletes.

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Vision : "To contribute to the sustainable development of society and that of the environment with which we interact."

Style believes in the ideology that in order to expand its horizon in the global market, it needs to have a sustainable business strategy. The company is committed to focusing as much on social and environmental concerns as they do on profits. Style follows 'Triple Bottom Line' (TBL) which is an accounting framework which aims to measure the social, environmental, and economic performance of the company over a period of time. As a part of its sustainable business strategy the company has undertaken the following initiatives :

- 100% waste was diverted from the landfill in the company's extended supply chain with at least 80% being recycled back into Style products. *for*
- Maintain 100% pay equity across all employee levels on an annual basis.
- 70% absolute reduction of greenhouse gas (GHG) emissions in owned or operated facilities through 100% renewable electricity and fleet electrification.
- Marketing strategy to communicate its commitment to the Triple Bottom to help win customers and continue to grow its loyal base of consumers.
- 25% reduction in freshwater usage per litre for textile dyeing and finishing.
- Cover 100% of employees' health insurance costs.

Style is deeply committed to achieving sustainable growth and financial success. However, since past three years the company has observed a decline in both top-line and bottom-line figures which is a matter of utmost importance. This decline serves as a critical signal to evaluate and address the challenges.

Decline in revenue (top-line) has resulted from various factors such as :

- The major issue faced by Style is a high level of competition by various other players in the market which are more or less of equal size. The market for products in apparel, sportswear, and supplements is anticipated to go on, and there exist several other companies which are involved in the same apparel industry as Style. This has posed a competitive challenge for the Style Limited as the consumer can opt to go for the alternative companies which offer the same products.
- Style predicts that emergence of new players is probable due to the potential attractiveness of the apparel industry.
- Style's clients and consumers involve both wholesale clients and retail clients. Wholesale clients, such as PQR Sporting Goods and the Sports Authority, have a height of negotiating influence, as they have a capability of substituting Style's merchandise for other companies with the same products to get the huge surplus.

The company does its retail business through retailers who stock other brands as well. This means that the diligently cultivated exclusivity is sometimes sacrificed because it has not yet spread its wings to include exclusive retailer outlets as part of its business strategy.

- Counterfeiting is a serious threat that causes Style to lose many potential sales. Style knock offs are easily found in a lot of markets.

Decrease in profitability (bottom-line) may be attributed to the following :

- Due to intense competition in the market, Style is forced to undertake strategies that will attract customers into the business. The on-going recession has also taken a heavy toll on Style with consumers becoming more price conscious and retailers demanding higher margins. The combination of retailing in third party outlets and competing brands cutting prices has made the going tough for Style.

One of the basic strategies undertaken by Style in the face of intensive competition is a price reduction. The price reduction affects the profitability margins resulting in low profit.

- Other major issues faced by Style are increased operating costs, inefficiencies in processes and fluctuation in raw material prices.

The CEO of Style, Mr Aariv has remarked, "Declines in top-line and bottom-line figures are not uncommon in the business world, and our management team is diligently working to identify the root causes of this decline and formulate a comprehensive plan to reverse the trend."

The Management team of Style has proposed a few initial suggestions to be implemented with immediate effect :

- The ultimate objective of Style should be, to achieve superior performance in comparison to their competitors and attain a definitive competitive advantage.
- Brands and organizations are normally different, as well as customers, therefore there is the requirement for brand strategy.
- The company needs to open exclusive retail outlets across the country.
- The company should outsource major aspects of its production to overseas facilities. Style's merchandise will be produced by a lot of manufacturers who are situated across different nations.

Required :

- | | |
|---|---|
| (i) Evaluate the company's mission statement. | 2 |
| (ii) Categorize the six sustainable business strategy initiatives undertaken by Style forming part of Triple Bottom Line' (TBL) framework mentioned above into - social bottom line, environmental bottom line or economic bottom line. Discuss very briefly the reason for classifying the initiative under a specific category. | 6 |
| (iii) Advise on the relevance of "Brand Strategy" in the context of Style. | 3 |
| (iv) Evaluate how industry structure analysis (Porter's five forces analysis) is helpful to assess the threat of new entrants into the market. Do you believe that the industry in which Style operates would be an easy welcome for the new entrants ? | 2 |
| (v) "Wholesale clients, such as PQR Sporting Goods and the Sports Authority, have a height of negotiating influence, as they have a capability of substituting Style's merchandise for other companies with the same products." Discuss what does this statement convey. | 2 |
| (vi) Do you foresee any challenges with outsourcing major aspects of production ? Explain. | 2 |
| (vii) Advise how IS/IT strategy would be appropriate to counter Porter's five forces to help an organisation have a more comfortable existence than its competitors. | 3 |

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2. (a) The Management of a Company aims to streamline its cost structure related to quality management while focusing on quality improvement. They have identified the following cost elements associated with quality :

Cost Elements	Amount (₹)
Product Returns and Replacements	2,40,000
Incoming Raw material Inspections	2,10,000
Packaging Material Inspection	1,05,000
Quality Audits	1,80,000
Materials Rejection and Disposal	95,000
Product Acceptance	1,55,000
Education of Suppliers	1,45,000
Rework of Defective products	1,40,000
Outside Certification	1,10,000
Cost of Recalls	90,000
Post-purchase Customer support	1,10,000
Supplier Evaluation and Selection	90,000
Production line testing	75,000
Downtime due to quality issues	2,15,000

Required :

- (i) Categorise each cost element into prevention, appraisal, internal failure, and external failure categories. 7
- (ii) Determine the percentage of total costs of quality incurred in each cost category by utilizing the provided cost breakdown for the company. 1
- (iii) Interpret the distribution of costs across different quality-related categories and suggest potential strategies the company could adopt to enhance its quality management practices while optimizing costs, with a focus on prevention, appraisal, and addressing failure costs. 2

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- (b) PQ Company, a manufacturer of computer games, has developed a new game called the 'WIN'. This is an interactive 3D game and is the first of its kind to be introduced to the market. PQ Company is going to launch the 'WIN' in time for the peak selling season.

The following cost details relate to 'WIN' are :

	Development	Launch	Growth	Maturity	Decline
Time period	Finished	1 year	1 year	1 year	1 year
R&D Costs (₹ in lakhs)	200				
Marketing Costs (₹ in lakhs)		50	40	30	9
Production cost per unit (₹)		250	225	200	225
Production volume (lakhs units)		1	5	10	4

The launch price is proving a contentious issue between managers. The Marketing Manager is keen to start with a low price of around ₹ 300 to gain new buyers and achieve target market share. The Account's Manager is concerned that this does not cover cost during launch phase and has produced the following schedule to support this :

Launch Phase	₹ in lakhs
Amortized R& D costs (200/4)	50
Marketing Costs	50
Production Costs (250*1)	250
Total Costs	350
Total production (units in lakhs)	1
Cost per unit (₹)	350

Traditionally PQ Company has priced its games based on standard manufacturing cost plus selling and administration cost plus a profit margin. However, the management team of PQ Company has recently attended a computer games conference where everyone was talking about life cycle costing and market based pricing approaches. The Managing Director of PQ Company would like more details on the topics they heard about and how they could have been applied to 'WIN'.

Required :

- (i) Calculate cost per unit for the whole life cycle of the product 'WIN' and comment on the implications of this cost with regards to the pricing of the product during the launch phase. 6
- (ii) Evaluate any one issue the management team will need to consider at each stage in the product life cycle of 'WIN'. 4

3. (a) Violet Limited comprises of two divisions, Division P and Division M, both of which are resident in a country where company profits are subject to taxation at 30%.

Division P is the Production division which assembles desktop computers and sells to several industry sectors. Many of the components used in these desktop computers are purchased from Division M.

Division M manufactures components from raw materials, many of which are imported. The components are sold globally. Some of the components are sold to Division P.

Both Division P and Division M are profit centres.

Operating results of both the divisions for the year ended 31st March 2023 are as follows :

	Division P	Division M
Particulars	Amount (₹)	Amount (₹)
External Sales	63,00,00,000	20,00,00,000
Sales to Division P	—	17,50,00,000
Total Sales	63,00,00,000	37,50,00,000
Less :		
Cost of Sales	45,00,00,000 *	12,50,00,000
Administration costs	11,00,00,000	6,50,00,000
Operating Profit	7,00,00,000	18,50,00,000

[*Cost of Sales in Division P includes the cost of components purchased from Division M.]

The current policy of the company is to allow the managers of each division to negotiate with each other concerning the transfer prices.

The manager of Division M charges the same price internally for its components that it charges to its external customers. The manager of Division M argues that this is fair because if the internal sales were not made, he could increase his external sales. An analysis of the market demand shows that currently Division M satisfies only 80% of the external demand for its components.

The manager of the production division, Division P believes that the price being charged by Division M for the components is too high and is restricting Division P's ability to win orders.

Recently Division P failed to win a potentially profitable order which it priced using its normal gross profit mark-up. The competitor who won the order set a price that was 10% lower than Division P's price.

An analysis of the cost structure of Division M indicates that 40% of the cost of sales is fixed costs and the remaining costs vary with the value of sales.

Required :

- (i) Evaluate how the present transfer pricing policy is affecting the overall performance of the group. 2
- (ii) Recommend, with appropriate calculations, the transfer price, or prices at which the components should be supplied by Division M to Division P. (Assume that if division M sells components internally, there is a chance of saving on distribution costs, bad debts risk and currency risk up to 10% of the sales amount. Another assumption is that if internal transfer is done at variable cost, then a small saving incentive of 10% may be added to the variable cost). 6
- (iii) The company's CEO is considering relocating Division M to a country that has a much lower rate of company taxation than that in its current location. Explain the potential tax consequences of the internal transfer pricing policy if Division M were to relocate. 2

(b) V-Air is one of the growing number of low-cost airlines in the country of YZ. V- Air's strategy is to operate a low-cost, high efficiency airline, and it does this by :

- Operating mostly in secondary cities to reduce landing costs.
- Using only one type of aircraft in order to reduce maintenance and operational costs. These planes are leased rather than bought outright.
- Having only one category of seat class.
- Having no pre -allocated seats or in-flight entertainment.
- Focusing on e-commerce with customers both booking tickets and checking in for flights online.

The airline was given an A+ grading by the country's aviation authority, which rank all of the country's airlines based on the number of flights which arrive on time at their destinations. Fifty eight V- Air flights were cancelled in 2022 compared to forty four in 2021. This increase was due to an increase in the staff absentee rate at V-Air from 4 days per staff member per year to 5.3 days.

The average 'ground turnaround time' for airlines in the country of YZ is 50 minutes, meaning that, on average, planes are on the ground for cleaning, refueling etc. for 50 minutes before departing again. Customer satisfaction surveys show that 85% of customers are happy with the standard of cleanliness on V-Air's planes.

The number of passengers carried by airline has grown from 4,00,000 passengers on a total of 3,850 Flights in 2021 to 9,75,000 passengers on 7,560 flight in 2022. The overall growth of V-Air has been helped by the limited route licensing policy followed by the government of country YZ. This has given V-Air almost monopoly status on some of its routes. However, the government is now set to change this policy with almost immediate effect and it has become more important than ever to monitor performance effectively.

Required :

- | | |
|--|---|
| (i) Discuss advantages of using financial measure as a performance measure. | 2 |
| (ii) Construct a Balanced Score Card table such that, for each perspective, TWO goals together with corresponding performance measures are identified for V- Air. Also evaluate why those goals and performance measures are relevant to V- Air. | 8 |

4. (a) DP Capital Advisors Private Limited is an investment advisory company which offers a wide variety of services on succession, real estate, insurance, and wealth management advisory services which is customizable to fit the client's individual needs. Over the past three years, DP has seen increased competition, evolving customer preferences, and rising costs. As a result, its profit margins have been steadily declining.

The Board of Directors of DP recognizes the urgent need to improve profitability. They believe that there is a need for Business Process Reengineering (BPR) effort which can help identify and address inefficiencies, streamline operations and ultimately boost profits.

Required :

- | | |
|---|---|
| (i) Explain very briefly what is meant by business process Reengineering (BPR). What is the purpose of business process reengineering ? | 2 |
| (ii) Recommend the main stages of a Business Process Reengineering (BPR) exercise. | 2 |
| (iii) Advise how Business Process Reengineering (BPR) could help to improve the profits of DP Capital. | 1 |

- (b) PQC owns and operates a chain of popular cocoa shops that serve over 50 different varieties of cocoa based beverages. The constraint at the cocoa shops is the amount of time required to fill an order, which can be considerable for the more complex beverages. Sales are often lost because customers leave after seeing a long waiting line to place an order. Intensive analysis of the company's existing products has revealed that the opportunity cost of order filling time is ₹ 180 per minute. The company is considering introducing a new product 'Dark Choco bar', to be made with dark cocoa, milk, cream and sugar. The variable cost of the standard size 'Dark Choco bar' would be ₹ 20 and the time required to fill an order for the beverage would be 40 seconds.

Required :

- (i) Recommend the minimum acceptable selling price for the 'Dark Choco bar' product. 3
- (ii) List the situations where 'minimum pricing approach' would be useful. 2

OR

'Sweda' is a small proprietary firm that engages in trading activities. In the last few months, 'Sweda' has witnessed significant growth in its business and is now considering whether to administer its own internal service department for maintaining books or use an external accounting service.

It has obtained the following cost estimates for each option :

Internal Service Department

	Amount (₹)
Purchase Hardware/Software	5,000 per annum
Hardware/Software Maintenance	2,500 per annum
Accounting Stationery	1,500 per annum
Part- time Accounting Clerk	60,000 per annum

External Service Department

	Amount (₹)	Volume
Processing of invoices/credit notes	2.5 per document	5,000 per annum
Processing of cheque payments	2.5 per cheque	4,000 per annum
Reconciling supplier accounts (Uniform through-out the year)	50 per supplier per month	150 suppliers

Required :

- (i) **Calculate** the net benefit/loss of outsourcing the accounting activities and advise on the course of action to be taken. 3
- (ii) **Evaluate** the qualitative factors involved in this outsourcing decision. 2

- (c) CAL Limited is a steel manufacturing company. The company has major expansion plans to make a global presence. The company recently automated its plant at the beginning of the current year and installed a flexible manufacturing system. CAL hired XYZ Consultants, a leading business consultancy firm to review its business processes and recommend suitable action plan.

XYZ Consultants have informed the management that several adjustment problems have been encountered, including problems relating to performance measurement. They have recommended the company to use performance measures for its operations such as throughput time, delivery cycle time and manufacturing cycle efficiency. In this connection, they have gathered data relating to these measures for the first four months of operations.

Particulars	Month 1	Month 2	Month 3	Month 4
Percentage of on-time deliveries	93%	88%	85%	81%
Total Sales (units)	3,310	3,172	3,015	2,906

Further, the following average times have been logged over the last four months :

Particulars	Average per month (days)			
	1	2	3	4
Move time per unit	0.5	0.4	0.5	0.5
Process time per unit	2.2	2.1	2.0	1.9
Wait time per order before start of production	16.5	18.0	19.5	21.0
Queue time per unit	4.4	5.1	5.9	6.8
Inspection time per unit	0.7	0.8	0.8	0.7

Required :

- (i) Calculate the throughput time, Manufacturing Cycle Efficiency (MCE) and the delivery cycle time for each month. 5
- (ii) Evaluate the company's performance over the last four months with respect to the three parameters as calculated in (i) above. 3
- (iii) XYZ Consultants have suggested in their report to management that "application of MCE (Manufacturing Cycle Efficiency) can be done in reducing the Non-Value-Added Activities." Advise how? 2

5. (a) CMP Chemicals have the following environmental activities and product information :

Environmental activity costs :

Activity	Costs
Design processes (to reduce pollution)	₹ 21,60,000
Test for contamination	₹ 38,40,000
Treat toxic waste	₹ 96,00,000
Maintain environmental equipment	₹ 60,00,000

Driver data :

	Solvent 'Acetone'	Solvent 'Benzene'
Design hours	4,000	2,000
Testing hours	3,500	4,500
Pounds of waste	2,000	38,000
Maintenance hours	400	9,600

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Other production data :

	Solvent 'Acetone'	Solvent 'Benzene'
Non-environmental production costs	₹ 4,41,60,000	₹ 7,82,40,000
Units produced	4,00,000	4,00,000

Required :

- (i) Calculate the environmental cost per unit and the total cost per unit of each product using Activity Based Costing (ABC). 6
- (ii) Assume that the design costs increased to ₹ 38,40,000 and the cost of toxic waste decreased to ₹ 48,00,000 and the Solvent Benzene uses 4,000 hours out of 8,000 (total new design hours) design hours. Also assume that waste is cut by 50 per cent and that Solvent Benzene is responsible for 18,000 of 20,000 pounds of toxic waste. Evaluate the new environmental cost per unit for Solvent Benzene. 2
- (iii) "The full and correct costing of products is a pre-condition for making sustainable business decisions such as the volume and choices of products to be produced. EMA converts many environmental overhead costs into direct costs and allocates them to the products that are responsible for their incurrence." In the light of this statement briefly, discuss the results of improved costing by EMA. 2

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- (b) SKY Limited is a well-established manufacturing company that operates in a competitive and rapidly changing industry. The company is currently using a traditional budgeting approach, preparing annual budgets based on historical data and top-down targets set by senior management. The priorities are discussed mostly or only at the senior management level as they are making decisions on the budget allocation. The finance team monitors actual vs. plan variance analysis.

However, the company is facing challenges in adapting to market fluctuations and lacks the agility to respond quickly to emerging trends. The management is considering transitioning to a different budgeting approach i.e. Beyond Budgeting. Going forward, SKY wants to move away from the existing planning processes. This new approach will lead to a drastic mind-set change across the business. Instead of asking "Do I have the budget for this ?", the organization would focus on "Is this the right thing to do for our customers ?". The Finance team will now play a key role in enabling communication, based on trust across cross functional teams, sending a clear message that there is no secret budget or hidden agenda. In the spirit of transparency, reporting outcomes will be shared across the business at all levels.

This transformation will help team members acquire broader skills by moving away from being purely financial analysts to becoming holistic analysts or business analyst.

Instead of reassessing all assumptions, all the time (what would happen in traditional budgeting), SKY will focus on those which have a real impact and only involve those people from the business they really needed, allowing the rest of the business to make an impact where it mattered the most - with the customers.

Required :

- (i) Discuss briefly the 'Traditional Budgeting Management Model' that SKY is following. 1
- (ii) Explain very briefly the key feature of 'Beyond Budgeting Model' in the context of SKY Limited. 2
- (iii) Principles for adaptive performance management are built upon foundation principles which relate to 'leadership principles' and 'management processes.' Few principles/ processes have been cited below : 5

Particulars	Whether 'Leadership Principle' or 'Management Processes'	Brief Explanation
Plans and Forecasts		
Resource Allocation		
Autonomy		
Transparency		
Customers		

From the above information, identify the 'leadership principle' or 'management processes' and discuss very briefly the principles/processes mentioned in the table.

- (iv) Discuss the key prerequisites for SKY's transitioning to Beyond Budgeting implementation. 2

6. (a) 'Kitchen Comfort' (KC) is a Company which manufactures innovative appliances to help the modern nuclear family in managing their cooking and cleaning needs. KC continually reviews its product range and enhances its existing products by developing new models to satisfy the demands of its customers. The company intends to always have products at each stage of the product lifecycle to ensure the company's continued presence in the market.

KC is currently reviewing its two flagship products, Product X and Product Y.

- I. Product X was introduced to the market some time ago and is now about to enter the maturity stage of its life cycle. The maturity stage is expected to last for 10 weeks. Each unit has a variable cost of ₹ 570 and takes 3 standard hours to produce. Market Research has identified four possible prices at which Product X could be sold and the expected demand at those prices.

Selling Price Per Unit (₹)	1,500	1,275	1,200	1,125
Weekly Demand (Units)	1,200	1,600	2,400	2,600

The Sales Director is confused which of four possible prices the company should charge in the next ten weeks.

- II. Product Y was introduced to the market two months ago using a penetration pricing policy and is now about to enter its growth stage. This stage is expected to last for 20 weeks. Each unit has a variable cost of ₹ 600 and takes 5 standard hours to produce. Market research has indicated that there is a linear relationship between its selling price and the number of units demanded, of the form $P = a - bx$. At a selling price of ₹ 1,250 per unit, demand is expected to be 1,500 units per week. For every ₹ 50 increase in selling price the weekly demand will reduce by 100 units and for every ₹ 50 decrease in selling price, the weekly demand will increase by 100 units.

The Company currently has a production facility which has a capacity of 12,000 standard hours per week. This facility is being expanded but the extra capacity will not be available for 10 weeks. Marks

Required :

- (i) Recommend which of the four selling prices should be charged for Product X, in order to maximize its contribution during its maturity stage. 3
- (ii) Assuming that product X is produced as recommended in (i), calculate the selling price of Product Y during its growth stage (for first 10 weeks and following 10 weeks). 5

- (b) SED Electronics is an Indian company specializing in the design, development and global distribution of electronic gadgets. Established in 1999 by Mr. ACE, the company has a global footprint, offering a diverse range of communication devices such as Bluetooth accessories, Infrared gadgets, Modems, Network cards, Smartphones, and Wi-Fi innovations.

In pursuit of incentivizing the sales team's performance within the smartphone division, the company's managing director has initiated a reward program for the month of December 2022. Among the accomplished sales managers, Mr. Zen has been singled out for his remarkable achievements during this period.

Mr. Zen encountered an unfavourable Sale Price Variance for the SM 20 smartphone model (featuring a 12 MP camera) amounting to ₹ 22,33,000. However, he skilfully countered this setback by strategically adjusting the pricing of the SM 50 smartphone variant (featuring a 50 MP camera). While the unit sales for SM 20 aligned with expectations, the exceptional performance in SM 50 led to a favourable Sale Margin Volume Variance of ₹ 22,50,000.

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Given these insights, the company's managing director seeks your expert analysis to evaluate Mr. Zen's performance comprehensively, aiding in the fair allocation of incentives among the sales managers. For the month December 2022, the following budgeted and actual data for the company's smart phone segment were taken from its records :

	Budgeted data			Actual data	
Smartphone	Sales (units)	Selling price (per system) ₹	Standard cost (per system) ₹	Sales (units)	Selling price (per system) ₹
SM 20 (Camera 12 MP)	1,750	21,500	14,500	1,750	20,224
SM 50 (Camera 50 MP)	625	52,000	29,500	725	55,080

The total market demand for SM 20 smartphone (Camera 12 MP) was as budgeted but as a result of suppliers reducing the price of supporting headphone devices, the total market demand for SM 50 smartphone (Camera 50 MP) rose by 40% in December 2022.

The company had sufficient capacity to meet the revised market demand for 875 units of its SM 50 smartphone (Camera 50 MP) and therefore maintained its market share.

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Required :

- (i) **Calculate** the following variances for both products :
- | | |
|-----------------------------------|---|
| (a) Sales Margin Mix Variance | 2 |
| (b) Sale Margin Quantity Variance | 2 |
| (c) Market Size Variance | 2 |
| (d) Market Share Variance | 2 |
- (ii) **Evaluate** the performance of Mr. Zen considering the Planning Variance and Operational Variance. 4
-