

<b>Semester: June 23 – Sept 23</b>		
<b>Maximum Marks: 50 Examination: ESE Examination Date: 12/11/2024 Duration: 2 Hrs</b>		
<b>Programme code: 01</b> <b>Programme: MBA</b>	<b>Class: FY</b>	<b>Semester/Triester: I</b>
<b>College: K J Somaiya Institute of Management</b>	<b>Name of the department/Section/Center: DST</b>	
<b>Course Code: 317P01C110</b>	<b>Name of the Course: Spreadsheet Modelling</b>	
<b>Instructions:</b> <b>1. Answer Any five of the following</b>		

<b>Question No.</b>		<b>Max. Marks</b>
<b>Q. 1 A</b>	Laxmi Engineering is manufactures auto components for 3 Car companies. The Director wants to understand the sales, revenue, Profit before tax and profits after tax for his company for the next 5 years. He estimates a Year1 sales as 12000 units, Year1SPrice as Rs.7.50 and Year1cost price as Rs.6. The yearly sales growth is assumed to be 15%, and he estimates yearly Selling Price growth as 8% and due to inflation yearly Cost increment at 5%. If the present tax rate is 20% and he pays annual bank interest as 8% on working capital, design a Spreadsheet model for 5 years to show the input parameters and business output variables. The bar chart shows the variation in Profit After tax and revenue growth for these 5 years.	<b>5 Marks</b>
<b>Q. 1 B</b>	You see an ad for a used car that you would like to buy. The ad says that the dealer will give you a Rs.100000 trade in on your old vehicle. The asking price for the car (before trade-in) is Rs. 500,000. They will offer you a 4% interest rate for a 3-year loan. What is the amount you need to finance? Determine what your monthly payments will be. Copy the work, and then use the Goal Seek tool to determine what the asking price of the car, before trade-in, would have to be to make a monthly payment of Rs. 5000. Also using data table analyze the monthly payment for various interest rates 4.5%, 5%, 5.5%, and 6% and various number of years 4,5,6.	<b>5 Marks</b>
<b>Q. 2</b>	explore using the "Electronic Sales Sep 2023-Sep 2024" dataset and find the answers <ol style="list-style-type: none"> <li>1. How many electronic items were sold in September 2023?</li> <li>2. How many units of a specific product, "Smartphone" were sold?</li> <li>3. How many transactions had a sale value greater than \$500?</li> <li>4. What is the total revenue from sales of laptops?</li> <li>5. What is the total revenue generated in October 2023?</li> <li>6. What is the total revenue for sales where the quantity sold is more than 5 units?</li> <li>7. How many sales of headphones were made in November 2023?</li> <li>8. How many transactions involved both Smartphones and sales amounts above \$1000?</li> <li>9. How many electronic items were sold in December 2023 in the "Online" sales channel?</li> <li>10. What is the total revenue generated from "Laptop" sales in "physical stores"?</li> </ol>	<b>10 Marks</b>
<b>Q. 3</b>	[A] You are part of a logistics company responsible for managing shipments and deliveries. Your manager has asked you to calculate the	<b>10 Marks</b>

	<p>number of working days required to complete various shipments, considering weekends (only Sunday) and holidays. <b>[Use Q3 A sheet]</b></p> <p><b>[B]</b> A company wants to quickly identify employees who have exceeded their sales targets to recognize top performers. Highlight those who have achieved more than their target sales so that they can be rewarded in an upcoming performance review meeting. As part of a quarterly performance review, the HR team wants to focus on employees who are struggling and may need additional support or training. Employees with a performance rating below 3 are considered low performers. The sales team needs a quick visual way to see how far each employee is from reaching their sales target. Employees who are closer to their targets are performing well, while those far from the target need more focus. Use the following rules. <b>[use Q3B sheet]</b></p> <ul style="list-style-type: none"> <li>• Green if sales are 90% or more of the target</li> <li>• Yellow if sales are between 70% and 90% of the target.</li> <li>• Red if sales are less than 70% of the target.</li> </ul>	<b>S</b>																								
<p><b>Q. 4</b></p>	<p>Eastman Publishing Company is considering publishing an electronic textbook titled “Spreadsheet applications for Business”. The fixed cost of manuscript preparation, textbook design, and web site construction is estimated to be \$160,000. Variable processing cost for an initial estimated demand quantity of 3500 is \$6 per book. The Eastman Publishing Company intends selling single user access to the book at \$46.</p> <p>Consider the following scenarios and using scenario manager generate a summary report that gives the profit for each of these scenarios.</p> <table border="1" data-bbox="248 1064 1227 1330"> <thead> <tr> <th></th> <th>Scenario1</th> <th>Scenario2</th> <th>Scenario3</th> <th>Scenario4</th> <th>Scenario5</th> </tr> </thead> <tbody> <tr> <td>Variable cost/Book</td> <td>\$6</td> <td>\$8</td> <td>\$12</td> <td>\$10</td> <td>\$11</td> </tr> <tr> <td>Access price</td> <td>\$46</td> <td>\$50</td> <td>\$40</td> <td>\$50</td> <td>\$60</td> </tr> <tr> <td>Demand</td> <td>2,500</td> <td>1,000</td> <td>6,000</td> <td>5,000</td> <td>2,000</td> </tr> </tbody> </table> <p>Which scenario yields the highest profit?</p> <p>Which scenario yields the lowest profit?</p>		Scenario1	Scenario2	Scenario3	Scenario4	Scenario5	Variable cost/Book	\$6	\$8	\$12	\$10	\$11	Access price	\$46	\$50	\$40	\$50	\$60	Demand	2,500	1,000	6,000	5,000	2,000	<b>10 Mark S</b>
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<p><b>Q. 5</b></p>	<p>Use file sales.xlsx file and answer</p> <ol style="list-style-type: none"> <li>1) Using pivot table find out yearly and within yearly quarterly revenue</li> <li>2) use conditional formatting to highlight the quarter with the highest revenue</li> <li>3) find out yearwise and region wise revenue</li> <li>4) create the pivot chart for revenue salesperson wise</li> <li>5) find out the sales person who gave us highest revenue</li> <li>6) find out which product is getting sold highest</li> <li>7) find out the product wise revenue and which product gave highest revenue</li> </ol>	<b>10 Mark S</b>																								

<b>Q. 6</b>	<p>Using <b>edate.xlsx</b> file and perform the following questions.[ use date functions]</p> <p><b>Questions</b></p> <p><b>1: How many years has Ganesh been employed?</b></p> <p><b>2: What is the total number of months Aliya Bhatt has been employed until her end date?</b></p> <p><b>3: What is the next end-of-month date for Bhavesh's contract?</b></p> <p><b>4: How many days remain until karan's contract ends?</b></p> <p><b>5: How many complete years and remaining months has jyoti been employed as of today?</b></p>	<b>10 Mark s</b>