INSTRUCTIONS

- *Attempt any 5*

- *Use SMExam.xlsx.*

Trimester: June 2024 – Sep 2024 Examination: Term End Examination		
Programme code: 01 **Programme: MBA**	**Class:** FY	**Semester:** I **(SVU 2022)**
Name of the Constituent College: **K. J. Somaiya Institute of Management**	**Name of the department/Section/Center:** DST	
Course Code: 317P01C110	**Name of the Course: Spreadsheet Modeling**	

QUESTION 1 (10 MARKS)

[A] Q1 sheet contains the portfolio information of various companies.

1) Add a column "**Value after sell**" and calculate the value of share after selling. Display the values in currency format.
2) Add a Column "Loss/Profit". If the value after sell is greater than value display "Profit" else display "Loss"
3) Plot graph to identify the company with high share values.
4) Identify the duplicate client names.
5) Add total row that computes the total of Price/Share and shares held, average of value and sell at.

QUESTION 2 (10 MARKS – 5 MARKS EACH)

[A]. Wood Walker is a self-employed furniture maker. He makes three different styles of tables: A, B, and C. Each model of table requires a certain amount of time for the cutting of component parts, for assembling, and for painting. Wood can sell all the units he makes. Model B may be sold without painting. Use the data below to formulate a spreadsheet model that will help Wood determine the product mix that will maximize his profit. **[Use Q2A sheet]**

[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.

QUESTION 3 (10 MARKS)

The budget for a concert is created using the worksheet. Use **Concert.xlsx** and use the following formulas to complete the spreadsheet and calculate the revenue generated.

Cell	Formula
Total costs	=total of B6 to B12
Ticket sales	=No. of seats X Price/ticket
Merchandising	=5 X No. of seats
Food & beverage	=15 X No. of seats
Total revenue	= Ticket sales + Merchandising+ Food & beverage
Profit or loss	= total revenue - total costs

Create scenarios to find out the values of total cost, total revenue and Profit for various number of seats 350, 400, 450 and price/ticket 40,50,60.

QUESTION 4 (10 MARKS)

[A] Given excel worksheet contains details players and their scores. You need to generate following information from the same using Pivot Tables and Charts. Use visualization wherever needed. [**Q4A sheet**]

1. What are the averages for yards in each team?
2. Find the team wise position wise catches.
3. Find the number of players in various conferences.
4. Find the team with the highest catches.
5. Find the conference wise yards for each team.

[B] Given excel worksheet contains the invoice data of stationary items. The manager needs to quickly have the respective details of the bill when the invoice number and the required detail name is entered. If he enters "12347" and "Total", it will return 99.8. **[Use Q4B sheet]**

QUESTION 5 (10 MARKS)

 Q5 sheet contains country wise gas emission data for various gas categories.
1. Find the number of data captured for the "waste" sector.

2. Find the total gas emission quantity for "building" sector.

3. Find the number of "ch4" and "n2o" gas categories

4. Find the number of data captured with start date after 31-12-2017.

5. Find the number of data captured with end date between 1-1-2018 to 31-12-2021.

6. Find the total gas emission quantity for other-onsite-fuel-usage.

7. Find the total gas emission quantity for waste section for co2e_100yr and co2e_20yr.

8. Find the total gas emission quantity for iso3_country "AIA" from ch4 gas.

QUESTION 6 (10 MARKS-5 MEARKS EACH)

[A] You are part of a logistics company responsible for managing shipments and deliveries. Your manager has asked you to calculate the number of working days required to complete various shipments, considering weekends (only Sunday) and holidays. **[Use Q6 A sheet]**

[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**. [use Q6B sheet]**

- Green if sales are 90% or more of the target

- Yellow if sales are between 70% and 90% of the target.
- Red if sales are less than 70% of the target.