

K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH

Program: PGDM(Exec) Tri-I (Batch 2017-2018)

Subject: IT for Management
End-Term Examination

Maximum Marks: 50

Duration: 3 hrs
2017

Date: 14th Dec,

Solve any 5 Questions

All questions carry equal marks.

Q. 1 Pedestrian.xlsx contains the data of pedestrians killed during different timeslots of the day. **[10 Marks]**

- 1) Find the total for each time slots and the number of pedestrians killed per weekdays, weekend and overall total.
- 2) Find out the percentage of the pedestrians killed on weekdays, weekends and total for each time slot.
- 3) Add column name “**Weekday/Weekend**”. If the count for weekend greater than weekday, this column will contain the value “weekend”, otherwise “weekday”.
- 4) Plot graph to identify the time when more pedestrian accident occurred.
- 5) Highlight the time with green color for the lowest count and highlight with red color for the highest count.

Q. 2 A) Blue Ridge Hot Tubs, Inc. sells two models of hot tubs: The Aqua-Spa and the Hydro-Lux. The company purchases prefabricated fiberglass hot tub shells and installs a common water pump and the appropriate amount of tubing into each hot tub. The number of hours it takes to install each model, the tubing required, and the profit for each of the two models is described in the given table. Apply formulas wherever necessary. Available pumps, labor, tubing values must be less than the number of these items available. Find out the number of each hot tub to be produced to maximize the profit. **[Use Solver.xlsx] [5 Marks]**

Q. 2 B) A Leading food processor manufacturing company has target for new financial year 2017-18 is to sell 10000 food processor. Price of food processor is Rs 3500. All the parts of the food processor are manufactured in house having setup cost Rs. 200 Lakhs and variable cost per food processor is Rs.1000/- . Find out profit loss in year 2017-18, if company achieved its target. How many products the need to manufacture to achieve break even. **[5 Marks]**

Q. 3 Question 3 (10 Marks)

[A] 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

Use the completed worksheet to create the following scenarios and analyze total costs, total revenue and profit.

Scenario	No. of seats	Price/Ticket
Case1	400	250
Case2	200	350
Case 3	300	400

Q. 4 A) The file **online training.xlsx** holds online management training data. You need to generate following information from the same using Pivot Tables and Charts.

[5 Marks]

1. What are the average purchase in each region?

2. What form of payment is most common?
3. Find the region wise count of customers
4. Find the number of customers who are using different sources of training.
5. Do our customers shop at work (most likely between 8:00 and 17:00) or at home?

Q. 4 B) Consider the problem of diet optimization. There are four different types of food: Brownies, Ice Cream, Cola, and Cheese Cake. The nutrition values and cost per unit are as follows:

	Brownies	Ice Cream	Cola	Cheese Cake
Calories	400	200	150	500
Chocolate	3	2	0	0
Sugar	2	2	4	4
Fat	2	4	1	5
Cost	50	20	30	80

The objective is to find a minimum-cost diet that contains at least 500 calories, at least 6 grams of chocolate, at least 10 grams of sugar, and at least 8 grams of fat. **[5 Marks]**

Q. 5 A) Gina Fox has started her own company, Foxy Shirts, which manufactures imprinted shirts for special occasions. Since she has just begun this operation, she rents the equipment from a local printing shop when necessary. The cost of using the equipment is \$350. The materials used in one shirt cost \$8, and Gina can sell these for \$15 each.

- (i) If Gina sells 20, 30, 50 shirts, what will her total revenue be? What will her total variable cost be?
- (ii) How many shirts must Gina sell to break even? What is the total revenue for this?

[5 Marks]

Q. 5 B) Golden Age Retirement Planners specializes in providing financial advice for people planning for a comfortable retirement. The company offers seminars on the important topic of retirement planning. For a typical seminar, the room rental at a hotel is \$2000, and the cost of advertising and other incidentals is about \$10,000 per seminar. The cost of the materials and special gifts for each attendee is \$60 per person attending the seminar. The company charges \$300 per person to attend the seminar as this seems to be competitive with other companies in the same business. How many people must attend each seminar for Golden Age to break even?

[5 Marks]

Q. 6) The sales data is given in **sales11.xlsx** file. And find out **[10**
Marks]

- 1) Find out quarterly and monthly revenue generated highlight highest revenue and the quarter in which highest revenue generated
- 2) Find out the region wise revenue generated highlight the region with highest revenue
- 3) Show percentage contribution of every region
- 4) Find out highest selling product
- 5) How the sales representative wise revenue we got.

-----End of Paper-----