K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH

Program:PGDM First Tri (Batch 2017-2019)

Subject: IT in Management
(Trimester End Examination)

Maximum Marks: 50   **Duration: 3 hours**   **Date : 26/09/2017**
Notes:
  1.   **Question No. 1 and 5 is compulsory**
  2.   **Answer any 2 questions from Question 2 to 4**

Question 1 (15 MARKS)

 [A] Use the file **Daily Sales.xls**   for calculating the incentive of the Sales Executives. This worksheet   contains Sales made   by the various Executives   during the January to March 2016. The Executives   from   Mumbai regions are taken for this scheme. Create a PIVOT TABLE to do the following:

  - Find the total premium Sales   made by   Each Sales Executive.
  - Find the Sales made in each product category (Home products, Office Automation Products and Health Care products and Furnishing Items) made by each Sales Executive.
  - Find the monthly Sales made by each Sales Executive in Health Care products category.
  - Create graph showing performance of each Sales Executive for all product category.
  - Show with graph - who is selling most in furnishing items category.

                                                                              [**5 Marks**]

 [B] Worldwide Sporting Goods order data is available in **Order data.xlsx.** Do the Following:
  - Using appropriate function display the price of each part in column "C" referring table available in lookup table worksheet
  - Calculate the amount of cost of parts in column E
  - Using table available in lookup table worksheet fill out column "F" with value of shipping charges.
  - As per company name different discount scales are decided. Pick up the discount scale value in column G referring table available in lookup table worksheet
  - Calculate discount on cost of parts in column H using following rates:
      - If discount scale is 3 then rate is 11% of cost of parts
      - If discount scale is 2 then rate is 8% of cost of parts
      - If discount scale is 1 then rate is 5% of cost of parts
  - Calculate total cost. Apply background color Green, if total cost value is greater than 10000; Apply background color Yellow, if total cost value is between 5000 and 10000; Apply background color Red, if total cost value is less than 5000.

- Display suitable chart to show % of contribution of each company.
- Create a combination chart showing quantity sold and total cost of each product. (Bar chart for quantity and line chart for total cost)

[10 Marks]

Question 2 (10 MARKS – 5 each)

[A] Mr. Jain, the marketing manager of ABC Typewriter Company is trying to decide on how to allocate his salesmen to the Company's three primary markets. Market-1 is an urban area and the salesmen can sell, on an average 40 typewriters a week. Salesmen in the other two markets can sell, on an average, 36 and 25 typewriters per week, respectively. For the coming week, 3 of the salesmen will be on vacation, leaving only 12 men available for duty. Also because of the lack of company cars, maximum of 5 salesmen can be allocated to market area 1. The selling expenses per week per salesman in each area are Rs. 800 per week for area 1, Rs. 700 per week for area 2, and Rs. 500 per week for area 3. The budget for the next week is Rs. 7500. The profit margin per typewriter is Rs. 150. How many salesmen should be assigned to each area in order to maximize profits?

[B] File **Population.xlsx** contents list of countries and their population for year 1950, 2000 and 2015. Create drop down list to select country and year. Display corresponding population of the country selected for selected year using Index and Match Functions available in excel.

Question 3 (10 MARKS- 5 Each)

[A] Lakeside Farm, property owners who are serving as bed-and-breakfast operators are doing following projection.

Monthly fixed cost (loan payment, taxes, insurance, maintenance) $6000
Variable cost per occupied room per night is $20
Revenue per occupied room per night is $80
Total rooms available in Lakeside farm are 40
1. Write the expression for total cost per month. Assume 30 days per month.
2. Write the expression for total revenue per month.
3. Write the expression for occupancy percentage.
4. If there are 12 guest rooms occupied, whether they will have profit or loss?
5. What percentage of rooms would need to be occupied to break even?

[B] Assume you own a book store and have 250 books in storage. You sell a certain % for the highest price of $50 and a certain % for the lower price of $20. If you sell 60% for the highest price and remaining for lower price, then calculate total revenue earned. [Use file: **Book Store.xlsx**]

You want to analyze with the help of data table - the total revenue for the different combinations of 'unit price (highest price)' and '% sold for the highest price'. Consider following different options for Unit price: $50, $55, $60, $65, $70. Consider following different options for '% sold for the highest price': 60%, 70%, 80%, 90% and 100%. Display total revenue earned for all options.

Question 4 (10 MARKS – 5 each)

[A] Create a Macro for calculating net salary for first month for all the employees. Run the same macro across all the worksheet to calculate net salary of other months.
- HRA is 45% of basic salary if not availed company quarters
- DA is 119% of basic salary.
- Performance pay should be calculated based as per performance band for the month. (For band 3 = 30000, for band 2 =20000 and for band 1 = 7500)
- Tax is calculated as 25% of gross salary.

Save this file as macro enabled workbook. [**Use file: SALARY DATA.XLSX**]

[B] Z studios are concert promoters and want to produce a show. They need to decide what venue to use because that will determine costs, revenues, profit or loss, and what talent to contract for.

They want to compare four different scenarios: Small, Medium, Large and Very Large locations and their associated costs and revenues, assuming each show sells out.

[Use file: Scenarios.xlsx] This sheet currently displays the smallest of the venues, which has 300 seats. The numbers in orange boxes are calculated, so we won't adjust them in the scenarios. Here are the formulas the calculated numbers use:
- B13: Total costs add the costs from the cells above.
- B19: Ticket sales multiplies the number of seats x ticket price (B4*B17).
- B20: Merchandising (t-shirts, souvenirs) assumes patrons purchase an average of **$5/seat** (5*B4).
- B21: Food & beverage assumes patrons purchase an average of **$15/seat** (15*B4).
- B22: Total revenue adds the revenues from the cells above.
- B24: Profit or loss subtracts total cost from total revenue (B22-B13).

	Small Venue	Medium Venue	Large Venue	Very Large Venue
Number of Seats	300	800	1500	5000
Artist	$4,000	$7,500	$12,000	$25,000
Venue Rental	500	1,000	3,500	10,000
Amplification	300	600	1,000	2,500
Lighting	250	350	700	2,000
Ticketing	200	250	350	500
Security	150	300	1,000	2,500
Insurance	100	250	500	2,500

Ticket Price	30	35	50	50

Question 5 (15 MARKS)

1. Create database with name **DOCTOR_CLINIC**
2. Create Following tables

Table: Patient		
Patient_Id	Text	Should start with 'P'
Name	Text	Should not be NULL
Age	Number	
P_Contact_No	Text	Should not exceed 10 digit
City	Text	

Table: Doctor		
Doctor_Id	Text	Should start with 'D'
Doc_Name	Text	
Doc_Contact_No	Text	Should not exceed 10 digit
Specialization	Text	Value list – Cardiologist, Pediatrician, Dietician, Orthopedic

Table: OPD		
OPD_Id	Text	Should start with 'O'
Patient_Id	Text	
Doctor_Id	Text	
OPD_Date	Date	
Charges	Number	

3. Create Relationships
4. Create following queries **[Any 10]**
    1. Display the details of the Patients examined by Dr. Ajit.
    2. Display the total charges earned on each day.
    3. Display the details of the doctor who attended OPD case number 'O104'.
    4. Display the Doctor details of specialization where specialization area will be provided at runtime.
    5. Increase the charges of the OPD case having OPD_id O102 by 100 rupees.
    6. Delete the details of Doctor having Id D104.
    7. Display details of patients who visited OPD on 15th September, 2017.
    8. Display the count of doctors of each specialization wise.
    9. Display the doctor's list whose name ends with character "a"
    10. Create a data entry form for inserting new patient record.
    11. Create a report showing list of doctor's specialization wise.

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