

K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH

PGDM(Communications) Tri-I (Batch 2017-2019)

IT In Management
End-Term Examination

Maximum Marks: 50

Duration: 3 hrs

Date: 25th September, 2017

Notes:

1. Each EXCEL question should be answered in a new-work-sheet of the same **WORKBOOK** which should be Saved with File Name in the following format only Excel_RollNo. in the given folder.
2. The Access files should be saved as Access_Rollno. in the given folder.

Solve any 3 (Three) from Q. 1 to Q. 4

Question 1 (10 Marks)

Pedestrian.xlsx contains the data of pedestrians killed during different timeslots of the day.

- 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.

Question 2 (10 Marks – 5 marks each)

[A]. **Mortgage.xlsx** contains the data for mortgage calculation. Given product price is Rs. 9,000. Down payment of Rs. 2000 is made. Calculate the monthly payments and the total amount to be repaid in 1 year if the interest rate is 12%. Copy the work, and then use the Goal Seek tool to determine the payment periods to make a monthly payment of Rs. 1000. Create a Datable to display the values for monthly payments with the interest rates 8%,9%,10% and 11%.

[B] 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]

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 |

Question 4 (10 Marks – 5 marks each)

[A] Given excel worksheet contains the quantity of various milk products of each year. When the manager asks, the employee needs to quickly have the respective quantity of the product for a specified year. The manager will provide the product name and year and
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worksheet will return the corresponding quantity of the product. [Use file: **Milkproducts.xlsx**]

[B] The file **online training.xlsx** holds online management training data. You need to generate following information from the same using Pivot Tables and Charts.

1. What are the averages for purchases 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?

Question 5 (20 Marks)

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

| Table: Employees | | |
|------------------|--------|-----------------------------|
| Employee_id | Text | Should start with 'E' |
| First_Name | Text | Should not be NULL |
| Last_Name | Text | |
| Email | Text | |
| Phone_number | Text | Should not exceed 10 digits |
| Hire_date | Date | |
| Job_id | Text | |
| Salary | Number | |
| Department_id | Text | |

| Table: Department | | |
|-------------------|------|-----------------------|
| Department_id | Text | Should start with 'D' |
| Dept_name | Text | |
| Location_id | Text | |

| Table: Locations | | |
|------------------|------|----------------------------|
| Location_id | Text | Should start with 'L' |
| Street_address | Text | |
| Postal_code | Text | Should not exceed 6 digits |
| City | Text | |
| State | Text | |
| Country_id | Text | |

| Table: Countries | | |
|------------------|------|-----------------------|
| Country_id | Text | Should start with 'C' |
| Country_name | Text | |
| Region_id | Text | |

| Table: Region | | |
|---------------|------|-----------------------|
| Region_id | Text | Should start with 'R' |
| Region_Name | Text | |

3. Create Relationships
4. Enter 5 rows in each table.
5. Create following queries
 1. Display the details of the Employee with Employee_id 'E1001'.
 2. Display the details of employee in a particular region.
 3. Display the location details of the employee when the employee number provided at runtime.
 4. Increase the salary of the employee with employee number 'E1002' by 5%.
 5. Delete the details of an employee with id 'E1005'

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