

K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH

Program: PGDM(FS) Tri-I (Batch 2016-2018)

Subject: Spreadsheet for Data analysis
End-Term Examination

Maximum Marks: 50
Duration: 3 hrs

Date: 20th September, 2015

Solve any 5 Questions
All questions carry equal marks.

Q. 1 a) Following data is about factories of CSS Corp. find out Achievements done by each factory. Calculate grades A+ for more than 100% achievement; A for 100% achievement and B for below 100% achievement. Also create chart to show the target and production of each factory. Create another chart for grades as well.

[5 Marks]

Places	Target	Production	Achievement	Grade
Mumbai	4800	6000		
Pune	5000	4500		
Raipur	5000	5000		
Indore	4500	4500		
Kolhapur	6700	7000		
Average				

B) Company has taken a loan Rs. 20,00000/- from ICICI Bank for 15 years at Interest rate is 9%. find out installments to be paid to bank. Total interest paid and total amount paid. find out for every installment principal and interest. Plot the chart for principal and interest paid in each installment.

[5

Marks]

Q. 2) Following is the data of employees for CSS corp.

[10 Marks]

Name	Sex	Post	Salary	Telephone
Ram Prasad	M	M.D.	20000.00	4333178
Lokendra bhatta	M	director	15000.00	4330375
Pratibha parajuli	F	director	14000.00	5525417
Shanti gurung	F	Manager	12000.00	4254588
Manoj karna	M	Officer	10000.00	6524587
Meera	F	director	15000.00	4230375
Raj	M	director	14000.00	5425417

Malhotra				
Shanti priya	F	Manager	15000.00	4754588
Manoj khurana	M	officer	10000.00	6574587
Nilima Bafna	F	officer	12000.00	7652322
Ramesh gothi	M	Manager	15000.00	7645323

- Find out total salary given to officer.
- Total salary paid to male Manager employee
- Total salary paid to female employee
- Find out who gets highest and lowest salary using Index and Match function
- Find out how many people are getting salary above 15000
- Find out how many managers have salary above 13000
- Find out total salary paid to female director
- Show graphically the salary we are paying to male and female employee
- Colour highest and lowest salary paid in the company

Q. 3 Buying a Car

[10 Marks]

You see an ad for a used car that you would like to buy. The ad says that the dealer will give anyone a \$1000 trade in on his or her old vehicle. The asking price for the car (before trade-in) is \$12,000. They will offer you a 4% interest rate for a 3-year loan. What is the amount you need to finance if you have old car and find out if you do not want to trade in your car what is the amount you need ? Use the PMT function to determine what your monthly payments will be. Copy the data in some other cells, 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 \$250. Show both scenarios in your worksheet.

Q. 4 . Use file **online data.xls** and perform the following using pivot table

[10 Marks]

- What are the averages for purchases in each region?
- Which region is giving us highest revenue? Please highlight in the pivot table.
- What form of payment is most common?
- Do our customers shop at work (most likely between 8:00 and 17:00) or at home?
- Which source should we concentrate more and why. Write in 3 to 4 lines

6. Show the customer source wise
7. Graphically show the amount product wise.

Q. 5 a) You run a factory that makes drinking glasses, which use a single machine. The machine is available for 60 hr/week. You run on a weekly production schedule where you spend all week producing glasses, accumulating your output in a warehouse. At the end of each week you ship out that week's production.

You produce two products, juice glasses and wine glasses; the machine takes 6 hours to produce 100 cases of juice glasses, and 5 hours to produce 100 cases of wine glasses. Each case of juice glasses takes up 10 cubic feet of storage in the warehouse; each case of wine glasses takes up 20 cubic feet of storage. The warehouse holds at most 15,000 cubic feet.

The net contribution per case of juice glasses to your profit (net of production costs) is \$5, and is \$4.50 per case of wineglasses. Your marketing department (your spouse, as this is a small company) estimates that you can sell as many cases of wineglasses as you can produce, but can sell a maximum of 800 cases of juice glasses per week. You must determine a production plan that respects all the limitations (constraints) which maximizes total net profit.

Use file: **Glasses.xlsx**

[5 Marks]

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 ABC Co. Ltd wants to analyze their net income. Use **ABC.XLSX** and use the following formulas to complete the spreadsheet to calculate net income. Do the further analysis using data table where copy volumes (Copies/Month/Copier) ranging from 22000 to 32000. You need to track how changes in copy volumes affect Net Income.

Cell	Formula
Fixed Expense per Copier (B7)	Monthly Lease Cost + Copier Service Cost + Other Fixed Costs
Revenue (B12)	No. Of Copier Leased x Copies/Month/Copier x Price Charged per Copy
Cost of Goods Sold (B13)	No. Of Copiers Leased x Copies/ Month/Copier x Variable Cost per Copy

Contribution Margine (B14)	Revenue – Cost of Goods Sold
General & Admin. Costs (B15)	No. Of Copiers Leased x (Fixed Expense per Copier + Space Rental Rate)
Net Income (B16)	Contribution Margin – General & Admin. Costs

Use the Scenario Manager to generate a summary of the below scenarios.

Scenario Name	Copy Volume (Copies/Month/Copier)
Expected Demand	30000
Very Low Demand	15,000
Very High Demand	50,000

The Scenario Manager should track the values for Revenue, Cost of Goods Sold, Contribution Margin, and General & Admin. Costs. **[10 Marks]**

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