

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2022-24)
END TERM EXAMINATION (TERM -II)**

Subject Name: **Advanced Excel & Data Visualization**

Time: **02.30 hrs.**

Sub. Code: **PG23**

Max Marks: **40**

Note:

- All questions are compulsory. Section A carries 5 marks: 5 questions of 1 marks each, Section B carries 21 marks having 3 questions (with internal choice question in each) of 7 marks each and Section C carries 14 marks one Case Study having 2 questions of 7 marks each.**
- The first page (of excel worksheet) should carry: Admission Number, Date of exam, Program, Section and course on top.**
- Keep the name of the sheet as Question Number**
Student are supposed to save the file using his/her full name and Admission No/Roll Number for example (ramkishan_PGDM22123)
- Students are supposed to submit the soft copies using a PD. Each student to carry his/her own Pen Drive (PD). Sharing of PD for submitting final ANSWER / SOLUTION is not allowed.**

Kindly write the all the course outcomes as per your TLEP in the box given below:

CO1- Use advanced Excel features to build analytical models to solve varied business problems
CO2- Apply advanced Excel features to empower business
CO3- Evaluate best, worst and most likely case scenarios for varied business problems
CO4- Develop full range dashboards and analyze data in multi-dimensional formats

SECTION – A

Attempt all questions. All questions are compulsory.

1×5 = 5 Marks

Questions	CO	Bloom's Level
Q. 1: (A). Find the total cost by multiplying Column E and F. Calculate Total Cost in cell G45 using SUMPRODUCT function. Q. 1: (B). Highlight cells of the "Central" region with blue color by using conditional formatting. Q. 1: (C). Find mean, median and mode single and ModeMult of Units (mention all modes in cells starting from K17). Q. 1: (D). Apply Data bars conditional Formatting in Total Cost Column. Q. 1: (E). Highlight cells with green color in which the number of units are greater than 80, with yellow color if number of units are 20 to 80 and with red color if number of units are less than 20.	CO1	L3

SECTION – B

All questions are compulsory (Each question have an internal choice. Attempt any one (either A or B) from the internal choice)

7 x 3 = 21 Marks

Questions	CO	Bloom's Level
Q. 2: (A). Create a Pivot Table and Pivot Chart from the given data. The resultant pivot table should summarize InsuredValue by BusinessType. Drop Construction into columns and Region into filters. Add a timeline and two slicers on State and Location.	CO2	L5

Or

Q. 2: (B).

- Apply VLOOKUP function to fetch Region and Insured Value from the PolicyData sheet (Q2. (A) sheet). (4 marks)
- Apply data validation from E2 to E7 to input the name. Text length should not be more than 15 characters. (1 mark)
- Apply data validation from F2 to F7 to input mobile number (10 digits are permitted). (1 mark)
- Apply data validation from G2 to G7 to input State. The list of states is given in column J. (1 mark)

Q. 3: (A). A typical business situation: You have the sales figures for the first three quarters and you want to know how much sales you have to make in the last quarter to achieve the target net profit for the year, say, \$100,000.

Or

Q. 3: (B). In the given table, Profit value is dependent on 3 variables- sale quantity, price per unit, and variable cost per unit. Check the final values of profit when we change the values of independent variables as per the given three scenarios. Name the range B2:B6 as per the column values on the left side. Create the listed scenarios by using scenario manager and find the scenario summary.

Q. 4: (A). Valencia Products Ltd. makes automobile radar detectors and assembles two models: LaserStop and SpeedBuster. The firm can sell all it produces. Both models use the same electronic components. Two of these can be obtained only from a single supplier. For the next month, the supply of these is limited to 4,000 of component A and 3,500 of component B. The number of each component required for each product and the profit per unit are given in the table:

Components Require/Unit			
	A	B	Profit/UnitA
LaseStop	18	6	\$24
SpeedBuster	12	10	\$40

How many of each product should be made by Valencia Products Ltd. to maximize gross profit margin?

Or

Q. 4: (B). A company has received a contract to supply gravel to three new construction projects located in town A, B, and C. The construction engineers have estimated that the required amounts of gravel which will be needed at these construction projects are:

Project Location	Weekly Requirement (Truckloads)
A	72
B	102
C	41

The company has 3 gravel pits located in towns X, Y, and Z. The gravel required by the construction projects can be supplied by three pits. The amount of gravel that can be supplied by each pit is as follows:

Plant	X	Y	Z
amount available (Truckloads)	76	82	77

The company has computed the delivery cost from each pit to each project site. These costs in Rs. Are shown in the following table:

CO3 L4

CO3 L4

	Project Location				
Pit	A	B	C		
X	4	8	8		
Y	16	24	16		
Z	8	16	24		

Schedule the shipment from each pit to each project in such a manner that it minimizes the total transportation cost.

SECTION – C

Read the case and answer the questions

7×02 = 14 Marks

Questions	CO	Bloom's Level
<p>Q. 5: Intellese Ltd. is an UK based IT company. It runs two types of stores- CompuTech and MicroWorld in a number of towns in UK. The company chairperson wants to see the performance of the company in terms of sales. The data is given in the MS Excel sheet.</p> <p>Q. 5: (A).</p> <ol style="list-style-type: none"> Create a pivot table displaying “Sales by Store”. Create pivot chart (pie chart) from this table. Create a pivot table displaying “Sales by Manager”. Create pivot chart (bar chart) from this table. Create a pivot table displaying “Sales by Category”. Drop store into legend. Create pivot chart (bar chart) from this table. Create a pivot table displaying “Sales by Month”. Create pivot chart (line chart) from this table. <p>Q. 5: (B). Create a dashboard “Sales Analysis Jan-June 2022”. Copy all the above charts in the dashboard. Add two slicers on Store and Category. Add two text boxes displaying total sales and highest selling category. Paste the logo of the company at upper left corner of the dashboard.</p>	CO4	L6

Kindly fill the total marks allocated to each COs in the table below:

COs	Marks Allocated
CO1	5 Marks
CO2	7 Marks
CO3	14 Marks
CO4	14 Marks

Blooms Taxonomy Levels given below for your ready reference:

- L1= Remembering**
- L2= Understanding**
- L3= Apply**
- L4= Analyze**
- L5= Evaluate**
- L6= Create**