

PREPARETORY EXAM MAY 2023

**COURSE CODE: COURSE NAME: DATA ANALYTICS USING EXCEL**

**Time: 02 Hours** **Maximum Marks:50**

**SECTION – I**

Answer any **FOUR** out of the following questions**. 4x5=20**

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| **Sl No** | **Question** | **CO** |
| **1** | Refer this data set for Question 1 and 2   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **OrderDate** | **Region** | **Rep** | **Item** | **Units** | **Unit Cost** | **Total** | | 1-6-21 | East | Jones | Pencil | 95 | 1.99 |  | | 1-23-21 | Central | Kivell | Binder | 50 | 19.99 |  | | 2-9-21 | Central | Jardine | Pencil | 36 | 4.99 |  | | 2-26-21 | Central | Gill | Pen | 27 | 19.99 |  | | 3-15-21 | West | Sorvino | Pencil | 56 | 2.99 |  | | 4-1-21 | East | Jones | Binder | 60 | 4.99 |  | | 4-18-21 | Central | Andrews | Pencil | 75 | 1.99 |  | | 5-5-21 | Central | Jardine | Pencil | 90 | 4.99 |  | | 5-22-21 | West | Thompson | Pencil | 32 | 1.99 |  | | 6-8-21 | East | Jones | Binder | 60 | 8.99 |  | | 6-25-21 | Central | Morgan | Pencil | 90 | 4.99 |  | | 7-12-21 | East | Howard | Binder | 29 | 1.99 |  | | 7-29-21 | East | Parent | Binder | 81 | 19.99 |  | | 8-15-21 | East | Jones | Pencil | 35 | 4.99 |  | | 9-1-21 | Central | Smith | Desk | 2 | 125.00 |  | | 9-18-21 | East | Jones | Pen Set | 16 | 15.99 |  | | 10-5-21 | Central | Morgan | Binder | 28 | 8.99 |  | | 10-22-21 | East | Jones | Pen | 64 | 8.99 |  | | 11-8-21 | East | Parent | Pen | 15 | 19.99 |  | | 11-25-21 | Central | Kivell | Pen Set | 96 | 4.99 |  | | 12-12-21 | Central | Smith | Pencil | 67 | 1.29 |  | | 12-29-21 | East | Parent | Pen Set | 74 | 15.99 |  | | 1-15-22 | Central | Gill | Binder | 46 | 8.99 |  | | 2-1-22 | Central | Smith | Binder | 87 | 15.00 |  | | 2-18-22 | East | Jones | Binder | 4 | 4.99 |  | | 3-7-22 | West | Sorvino | Binder | 7 | 19.99 |  | | 3-24-22 | Central | Jardine | Pen Set | 50 | 4.99 |  | | 4-10-22 | Central | Andrews | Pencil | 66 | 1.99 |  | | 4-27-22 | East | Howard | Pen | 96 | 4.99 |  | | 5-14-22 | Central | Gill | Pencil | 53 | 1.29 |  | | 5-31-22 | Central | Gill | Binder | 80 | 8.99 |  | | 6-17-22 | Central | Kivell | Desk | 5 | 125.00 |  | | 7-4-22 | East | Jones | Pen Set | 62 | 4.99 |  | | 7-21-22 | Central | Morgan | Pen Set | 55 | 12.49 |  | | 8-7-22 | Central | Kivell | Pen Set | 42 | 23.95 |  | | 8-24-22 | West | Sorvino | Desk | 3 | 275.00 |  | | 9-10-22 | Central | Gill | Pencil | 7 | 1.29 |  | | 9-27-22 | West | Sorvino | Pen | 76 | 1.99 |  | | 10-14-22 | West | Thompson | Binder | 57 | 19.99 |  | | 10-31-22 | Central | Andrews | Pencil | 14 | 1.29 |  | | 11-17-22 | Central | Jardine | Binder | 11 | 4.99 |  | | 12-4-22 | Central | Jardine | Binder | 94 | 19.99 |  | | 12-21-22 | Central | Andrews | Binder | 28 | 4.99 |  |   Write formula to calculate Total. Also find out Average, max, min of Total. | 1 |
| **2** | **Demonstrate** use conditional formatting in this data in correct places and show top 5 items based on Total. | 1 |
| **3** | Use these tables for Question 3 and 4  Master Data   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Emp id** | **Name** | **Salary** | **Department** | **Manager** | | A101 | Amar | 50000 | HR | Mohit | | A102 | Ram | 30000 | Marketing | Mohit | | A103 | Sam | 45000 | Finance | Mohit | | A104 | Mohit | 75000 | IT | - | | A105 | Abdul | 12000 | Operations | Mohit |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | **A** | **B** | **C** | **D** | **E** | **F** | | 1 | **Sl.** | **Emp id** | **Name** | **Salary** | **Department** | **Manager** | | 2 | 1 |  |  |  |  |  | | 3 | 2 |  |  |  |  |  | | 4 | 3 |  |  |  |  |  | | 5 | 4 |  |  |  |  |  | | 6 | 5 |  |  |  |  |  | | 7 |  |  | **Grand total** |  |  |  |   Use above master data and write formula to display Name, Salary, department and Manager. You need to use HLookup. You can change formatting of master data as per your requirement. | 2,3,4 |
| **4** | Create a drop down for Emp id in the cell B2 to B6. |  |
| 5 | Write formula to calculate (Price \* Quantity), Total Amount – I and Total Amount - II. Also calculate Grand Total. Price for the products are given in Cell C8 and C9.  See the format here:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | **A** | **B** | **C** | **D** | **E** | **F** | | **1** | **Locations** | **Speakers**  **(Quantity)** | **Total Amount -I** | **Ear Phone**  **(Quantity)** | **Total Amount -II** | **Grand Total** | | **2** | Zone 1 | 10 |  | 10 |  |  | | **3** | Zone 2 | 5 |  | 20 |  |  | | **4** | Zone 3 | 20 |  | 30 |  |  | | **5** | Zone 4 | 15 |  | 40 |  |  | | **6** | **Grand Total** |  |  |  |  |  | | **7** |  |  |  |  |  |  | | **8** | **Speakers** | 900 |  |  |  | | **9** | **Ear phone** | 560 |  |  |  | |  |

**SECTION – II**

Answer any **TWO** of the following questions**. 2x9=18**

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| **Sl No** | **Question** | **CO** |
| **6** | Use the data given in file sampledatasafety.xlsx. You are required to create a mini dashboard with at least 4 tables and 4 interactive and meaningful chart. (Use Slicer for this). The data is attached in the google class room for your reference. ***(Paste the data in your answer sheet and proceed)*** | 2,3,4 |
| **7** | Enter **MARKS** for 10 students out of 100 and find out grades of the students based on following criteria (You can use if condition or Vlookup/Hlookup).   |  |  | | --- | --- | | Average Marks | Grade | | >=75 | A++ | | >=70 | A | | >=60 | B+ | | >=40 | B | | <40 | Fail | |  |
| **8** | In the [Pinevalley.xlsx](about:blank) file, the first worksheet contains the salaries of several employees at Pine Valley University, the second worksheet contains the age of the employees, and the third worksheet contains the years of experience. Create a fourth worksheet that contains the salary, age, and experience for each employee. |  |

**SECTION – III**

Case Study: **Compulsory 12**

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| **Sl No** | **Case Study** | **CO** |
| **9** | Create a Loan Calculator in following format: The calculator will accept 4 inputs, Loan Amount, Rate of Interest, Year and Date and all other outputs should be generated as given in following sample  Note: *The Model should be capable of handling any entry, for example if the loan is 10 years, 120 Emi should be generated!*     |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | Loan Amount | ₹ 10,000.00 |  |  |  | |  | Rate of Interest | 8% |  |  |  | |  | Year | 0.5 |  |  |  | |  | Date | 3/28/2023 |  |  |  | |  | EMI | ₹ 1,705.77 |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | EMI # | Date of EMI | Principal | Total EMI | Balance | Interest | | 1 | 3/28/2023 | ₹ 1,639.10 | ₹ 1,705.77 | ₹ 8,360.90 | 66.66667 | | 2 | 4/28/2023 | ₹ 1,650.03 | ₹ 1,705.77 | ₹ 6,710.86 | 55.73931 | | 3 | 5/28/2023 | ₹ 1,661.03 | ₹ 1,705.77 | ₹ 5,049.83 | 44.73909 | | 4 | 6/28/2023 | ₹ 1,672.11 | ₹ 1,705.77 | ₹ 3,377.73 | 33.66555 | | 5 | 7/28/2023 | ₹ 1,683.25 | ₹ 1,705.77 | ₹ 1,694.47 | 22.51818 | | 6 | 8/28/2023 | ₹ 1,694.47 | ₹ 1,705.77 | ₹ 0.00 | 11.2965 | | CO1  CO3, 4  CO2, 5 |