

**MA Public Policy**

preparatory exam, MAY 2023

**cOURSE CODE: 21JUGE1112 Course Name: DATA ANALYTICS USING EXCEL**

**Time: 02:30 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   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** | **K** | **L** |  | | **1** | **Reg No** | **Name** | **Phy** | **Che** | **Bio** | **Math** | **Eng** | **Hindi** | **Total** | **Average** | **Max** | **Min** |  | | **2** | 1001 | Ram | 12 | 15 | 32 | 41 | 12 | 2 |  |  |  |  |  | | **3** | 1002 | Mohit | 67 | 89 | 91 | 88 | 85 | 78 |  |  |  |  |  | | **4** | 1003 | Ravi | 60 | 41 | 30 | 70 | 57 | 71 |  |  |  |  |  | | **5** | 1004 | Sam | 18 | 42 | 18 | 20 | 16 | 67 |  |  |  |  |  | | **6** | 1005 | Merry | 78 | 78 | 89 | 78 | 94 | 78 |  |  |  |  |  | | **7** | 1006 | Jhon | 22 | 74 | 32 | 53 | 18 | 47 |  |  |  |  |  | | **8** | 1007 | Abdul | 56 | 65 | 66 | 72 | 48 | 56 |  |  |  |  |  | | **9** | 1008 | Aug | 78 | 72 | 95 | 78 | 88 | 55 |  |  |  |  |  |   Write formula to calculate Total, Average, Max and Min marks | 1 |
| **2** | Use conditional formatting in this data in correct places and write your interpretation. | 1 |
| **3** | Use these tables for Question 3 and 4  Master Data   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Prod id** | 101 | 102 | 103 | 104 | 500 | | **Name** | Pen | Pencil | Eraser | A4 Sheet | Notebook | | **Price** | 25 | 5 | 2 | 250 | 75 | | **Description** | Reynolds | Camlin | Natraj | JK Paper | ITC | | **Discount %** | 2% | 1% | 1% | 15% | 5% |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | | 1 | **Sl.** | **Prod id** | **Name** | **Price** | **Description** | **Discount %** | **Qty** | **Discount Amount** | **Amount Payable** | | 2 | 1 | 103 |  |  |  |  |  |  |  | | 3 | 2 | 104 |  |  |  |  |  |  |  | | 4 | 3 | 500 |  |  |  |  |  |  |  | | 5 | 4 | 104 |  |  |  |  |  |  |  | | 6 | 5 | 102 |  |  |  |  |  |  |  | | 7 |  |  | **Grand total** |  |  |  |  |  |  |   Use above master data and create the Bill format given above. Here, When Prod id is entered, Name, Price, Description and Discount % should be displayed automatically. Also calculate Discount Amount and Amount Payable. | 2,3,4 |
| **4** | Create a drop down for Prod id in the cell B2 to B6, in the above template. |  |
| 5 | Write formula to calculate (Revenue) Rev-I and (Revenue) Rev-II and Total Revenue. Also calculate Grand Total.  See the format here:   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  | **A** | **B** | **C** | **D** | **E** | **F** | | **1** | **City** | **Web cam**  **(Quantity)** | **Rev-I** | **MP3 Player**  **(Quantity)** | **Rev-II** | **Total Rev** | | **2** | Bangalore | 9 |  | 10 |  |  | | **3** | Chennai | 12 |  | 20 |  |  | | **4** | Mysore | 10 |  | 5 |  |  | | **5** | Mangalore | 5 |  | 12 |  |  | | **6** | **Grand Total** |  |  |  |  |  | | **7** |  |  |  |  |  |  | | **8** | **Web cam** | ₹ 1240.00 |  |  |  | | **9** | **MP3 Player** | ₹ 890.00 |  |  |  | |  |

**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 Master data Sheet. Do Data analysis based on Rep, Region, Item and Order Date. Generate 4 Reports with Chart. Write your interpretation also.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **OrderDate** | **Region** | **Rep** | **Item** | **Units** | **Unit Cost** | **Total** | | 3/31/23 | East | Jones | Eraser | 95 | 1.99 | 189.05 | | 3/31/23 | North | Kivell | Folder | 50 | 19.99 | 999.50 | | 3/31/23 | North | Jardine | Eraser | 36 | 4.99 | 179.64 | | 3/31/23 | North | Gill | Pen | 27 | 19.99 | 539.73 | | 3/30/23 | West | Sorvino | Eraser | 56 | 2.99 | 167.44 | | 3/30/23 | East | Jones | Folder | 60 | 4.99 | 299.40 | | 3/30/23 | North | Andrews | Eraser | 75 | 1.99 | 149.25 | | 3/30/23 | North | Jardine | Eraser | 90 | 4.99 | 449.10 | | 3/30/23 | West | Thompson | Eraser | 32 | 1.99 | 63.68 | | 3/30/23 | East | Jones | Folder | 60 | 8.99 | 539.40 | | 3/30/23 | North | Morgan | Eraser | 90 | 4.99 | 449.10 | | 3/30/23 | East | Howard | Folder | 29 | 1.99 | 57.71 | | 2/26/23 | East | Parent | Folder | 81 | 19.99 | 1,619.19 | | 2/26/23 | East | Jones | Eraser | 35 | 4.99 | 174.65 | | 2/26/23 | North | Smith | Chair | 2 | 125.00 | 250.00 | | 2/26/23 | East | Jones | Pen Set | 16 | 15.99 | 255.84 | | 2/26/23 | North | Morgan | Folder | 28 | 8.99 | 251.72 | | 3/30/23 | East | Jones | Pen | 64 | 8.99 | 575.36 | | 3/30/23 | East | Parent | Pen | 15 | 19.99 | 299.85 | | 2/26/23 | North | Kivell | Pen Set | 96 | 4.99 | 479.04 | | 2/26/23 | North | Smith | Eraser | 67 | 1.29 | 86.43 | | 2/27/23 | East | Parent | Pen Set | 74 | 15.99 | 1,183.26 | | 2/28/23 | North | Gill | Folder | 46 | 8.99 | 413.54 | | 3/1/23 | North | Smith | Folder | 87 | 15.00 | 1,305.00 | | 3/2/23 | East | Jones | Folder | 4 | 4.99 | 19.96 | | 3/3/23 | West | Sorvino | Folder | 7 | 19.99 | 139.93 | | 2/27/23 | North | Jardine | Pen Set | 50 | 4.99 | 249.50 | | 2/27/23 | South | Andrews | Eraser | 66 | 1.99 | 131.34 | | 2/27/23 | East | Howard | Pen | 96 | 4.99 | 479.04 | | 2/27/23 | North | Gill | Eraser | 53 | 1.29 | 68.37 | | 3/1/23 | North | Gill | Folder | 80 | 8.99 | 719.20 | | 3/1/23 | North | Kivell | Chair | 5 | 125.00 | 625.00 | | 3/1/23 | South | Jones | Pen Set | 62 | 4.99 | 309.38 | | 3/1/23 | North | Morgan | Pen Set | 55 | 12.49 | 686.95 | | 2/28/23 | South | Kivell | Pen Set | 42 | 23.95 | 1,005.90 | | 2/28/23 | West | Sorvino | Chair | 3 | 275.00 | 825.00 | | 2/28/23 | North | Gill | Eraser | 7 | 1.29 | 9.03 | | 2/28/23 | West | Sorvino | Pen | 76 | 1.99 | 151.24 | | 2/28/23 | West | Thompson | Folder | 57 | 19.99 | 1,139.43 | | 2/28/23 | North | Andrews | Eraser | 14 | 1.29 | 18.06 | | 2/28/23 | South | Jardine | Folder | 11 | 4.99 | 54.89 | | 2/28/23 | South | Jardine | Folder | 94 | 19.99 | 1,879.06 | | 2/28/23 | South | Andrews | Folder | 28 | 4.99 | 139.72 | |  |
| **7** | Refer data of Q1 and Q2 and find out grades of the students based on following criteria (You can use if condition or Vlookup/Hlookup).   |  |  | | --- | --- | | Average Marks | Grade | | >=80 | A+ | | >=60 | A | | >=50 | B | | >=40 | C | | <40 | Fail | |  |
| **8** | In the [Pinevalley.xlsx](file:///C:\Users\staff96\Downloads\Pinevalley.xlsx) 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:   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | 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 | | Interest | | Total EMI | | Balance | | | 1 | 3/28/2023 | ₹ 1,639.10 | | 66.66667 | | ₹ 1,705.77 | | ₹ 8,360.90 | | | 2 | 4/28/2023 | ₹ 1,650.03 | | 55.73931 | | ₹ 1,705.77 | | ₹ 6,710.86 | | | 3 | 5/28/2023 | ₹ 1,661.03 | | 44.73909 | | ₹ 1,705.77 | | ₹ 5,049.83 | | | 4 | 6/28/2023 | ₹ 1,672.11 | | 33.66555 | | ₹ 1,705.77 | | ₹ 3,377.73 | | | 5 | 7/28/2023 | ₹ 1,683.25 | | 22.51818 | | ₹ 1,705.77 | | ₹ 1,694.47 | | | 6 | 8/28/2023 | ₹ 1,694.47 | | 11.2965 | | ₹ 1,705.77 | | ₹ 0.00 | | |  |  |  | |  | |  | |  | | | CO1  CO3, 4  CO2, 5 |