ECAEC391

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RAMAIAH
Institute of Technology

(Autonomous Institute, Affiliated to VTU)
(Approved by AICTE, New Delhi & Govt. of Karnataka)
Accredited by NBA & NAAC with 'A+' Grade

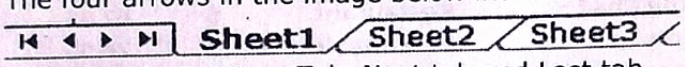
SEMESTER END EXAMINATIONS – MARCH 2024

Program	:	**B.E. – Electronics and Communication Engineering**	**Semester**	:	**III**
Course Name	:	**Data Analytics using Excel**	**Max. Marks**	:	**50**
Course Code	:	**ECAEC391**	**Duration**	:	**2 Hrs**

Instructions to the Candidates:

- **PART – A** : Answer all the questions.
- **PART – B** : Answer one full question from each unit.

PART – A

1.	Worksheet names can be of (a) 8 characters (b) 16 characters (c) 31 characters (d) 32 characters	CO1	(01)
2.	The four arrows in the image below indicate:  (a) First tab, Previous Tab, Next tab and Last tab (b) Last tab, Tab, First tab and Last tab (c) Next tab, Last Tab, Previous tab and First tab (d) First tab, Next Tab, Last tab and Previous tab	CO1	(01)
3.	First date in Microsoft excel is (a)1/1/2000 (b) 1/1/1900 (c) 31/12/1899 (d) 1/1/1800	CO2	(01)
4.	In accounting format, the currency symbols is aligned (a) To the left of the currency (b) To the right of the currency (c) Left aligned along the column (d) Right aligned along the number	CO2	(01)
5.	To calculate, summarize, and analyze data that lets you see comparisons, patterns, and trends in your data, one uses: (a) Pictures (b) Charts (c) Sheets of data (d) Pivot Table	CO3	(01)
6.	To add images from web-pages in Excel, you need to use the image search engine from (a) Bing (b) Google (c) Microsoft (d) Yahoo	CO3	(01)
7.	What analysis will be used for the following scenario Would you be able to sell more items if you had a sale this week? Or would you make more money by increasing the price instead? (a) What-if analysis (b) Count and average (c) Bar chart (d) Pivot table	CO4	(01)
8.	What is used to view data in more meaningful way? (a) Sheets (b) Formula (c) Workbooks (d) Charts	CO4	(01)
9.	Statistical association between two variables is defined as (a) Bar charts (b) Pivot Table (c) Correlation (d) Pie Chart	CO5	(01)
10.	In regression analysis, the main factor you are trying to understand and predict (a) Independent variables (b) Dependent variables.	CO5	(01)

PART – B

UNIT – I

1. What is the difference between SUM and SUMIF function in Excel? For the data given below, find the total restaurant expenses and the total of the expenses that are greater than $50. CO1 (08)

	A	B	C
1	Transaction Description	Expense Type	Amount
2	Chester Diner	Restaurant	$ 24.22
3	Income Tax Payment	Taxes	$ 535.00
4	Ole Tymes Cafe	Restaurant	$ 12.58
5	Plane ticket to Melbourne	Travel	$ 654.32
6	Odessa's	Restaurant	$ 13.36
7	Car Rental in Australia	Travel	$ 185.55
8	K Crew	Clothing	$ 86.99
9	Ruby's Famous Bbq Joint	Restaurant	$ 5.66
10	Street Corner Market	Restaurant	$ 9.85
11	Airport Parking	Travel	$ 22.55
12	The Friendly Chef	Restaurant	$ 67.85
13	Floorgreen's	Personal Items	$ 24.55
14	Orange Democracy	Clothing	$ 86.99
15	Car Care	Auto Expense	$ 24.22
16	The Narrow Lantern	Restaurant	$ 101.33
17	Nights Inn	Travel	$ 84.55

2. For the data given below: CO1 (08)

	A	B	C
1	Item	Qty.	
2	Apples	1	
3	Oranges	2	
4	Lemons	3	
5	Oranges	2	
6	Apples	3	

(i) Find total number of apples.
(ii) Find the average of all the apples.
(iii) Find the largest and the smallest value in the given data.
(iv) Find the count of apples and oranges.

UNIT – II

3. In the following given data: CO2 (08)

Camper Name	Gender	Grade	Cabin Color	Counselor
Kacey Cranston	Female	6	Pink	Stone
John Gibbs	Male	8	Orange	Smith
Susana Jimenez	Female	8	Yellow	Chang
Flora Jones	Female	7	Green	Gorecki
Tia Carter	Female	6	Pink	Stone
Miles Goldstein	Male	8	Orange	Smith
Taquan Holder	Male	7	Black	Patel
Mariela Flores	Female	9	Red	Leslie
Priya Dwivedi	Female	9	Red	Leslie
Claire Smith	Female	6	Pink	Stone
William Krywinski	Male	6	Blue	Hernandez
Mark Mealer	Male	7	Black	Patel
Shivangi Patel	Female	8	Yellow	Chang
Jessica Locklear	Female	9	Red	Leslie
Niall St. Clair	Male	9	Purple	Assaf

Explain in detail the steps involved to create a custom sort that sorts by Grade from Smallest to Largest and then by Camper Name from A to Z.

4. CO2 (08)

Student Name	Gender	Major	CPR	First-Aid	AED
Jackson Collier	M	Math	X		X
Ming Li	F	Biomedical Engineering	X	X	
Sriya Patel	F	Women's Studies		X	X
Sadie Locke	F	Engineering	X		X
Maxine Germaine	F	Textiles	X	X	
John Carter	M	Math			
Porter Talia	M	Women's Studies	X		X
Jessica Jimenez	F	English	X	X	X
Joseph Lewis	M	Art		X	X
Kelly Greene	F	Engineering	X	X	X
Emerald D'Agostino	F	Bio		X	
Alyssa Jackson	F	Bio	X	X	
Tia Polero	F	Physics	X	X	
Richard Kim	M	Physics	X	X	X
Quentin Cutter	M	Bio		X	X
Joshua Brandt	M	Art	X		X
Crystal Lewis	F	Textiles	X	X	
Portia Keller	F	Math	X	X	
Marques Quentin	M	Biomedical Engineering	X	X	X
Asal Skasireddy	M	Physics	X		
Karen Greenwood	F	Women's Studies		X	X
Jackie Cranston	F	Bio	X		X
Martin Fuller	M	Physics		X	

For the data given above:

(i) Crystal Lewis got married and changed her last name to Taylor. Use Find and Replace to change Crystal's last name from Lewis to Taylor

(ii) Find and replace Bio with Biology.

(iii) Replace the Physics major to Physical Science.

UNIT – III

5. What is a pivot table and what are its uses? Explain with an example. CO3 (08)

6. Explain the steps involved in inserting: CO3 (08)

(i) Image from the computer

(ii) Image from the web-page

(iii) Single image in a cell

(iv) Multiple images in cells in a sheet.

UNIT – IV

7. a) What is a Scenario in Excel and how is it used? Explain with an example. CO4 (04)

b) Explain with an example what is goal seek in Excel? CO4 (04)

8. Explain the different types of charts in Excel using appropriate figures. CO4 (08)

UNIT – V

9. For the rainfall data shown below along with the umbrellas sold per month, state the steps involved to use regression and state the independent and dependent variables. CO5 (08)

	A	B	C
1	Month	Rainfall (mm)	Umbrellas sold
2	Jan	82	15
3	Feb	92.5	25
4	Mar	83.2	17
5	Apr	97.7	28
6	May	131.9	41
7	Jun	141.3	47
8	Jul	165.4	50
9	Aug	140	46
10	Sept	126.7	37

10. What is correlation? Explain types of correlations with examples and appropriate figures. CO5 (08)

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