LABORATORY HANDOUT
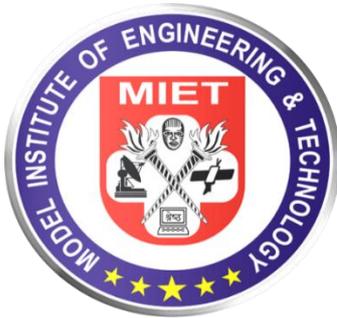
Excel for Business Analysis (UGSEC-204 (A))

BBA- 2^{ND}SEMESTER

ACADEMIC YEAR (2024-25)

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Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
							Sessional	Final Exam	Total
UGSEC-204 (A)	Excel for Business Analysis	SEC	2	0	0	4	50	-	50

COURSE OUTCOMES

	At the end of the course the student will be able to:
CO1	Examine the basics of the workbook and worksheet.
CO2	Apply custom data formats and layouts to create and manage tables.
CO3	Asses various formulas and functions in excel.
CO4	Analyze data by using charts and graphs in excel.
CO5	Create advanced formulas.

LIST OF EXPERIMENTS

S.No.	Title
1	Create Worksheets and Workbooks, Format Worksheets and Workbooks, -Create a Payroll Program. 1. Open a new workbook and save the file with the name "Payroll". 2. Enter the labels and values in the exact cells locations as desired. 3. Use AutoFill to put the Employee Numbers into cells A6:A8. 4. Set the columns width and rows height appropriately. 5. Set labels alignment appropriately. 6. Use warp text and merge cells as desired. 7. Apply borders, gridlines and shading to the table as desired. 8. Format cell B2 to Short Date format. 9. Format cells E4:G8 to include dollar sign with two decimal places. 10. Calculate the Gross Pay for employee; enter a formula in cell E4 to multiply Hourly Rate by Hours Worked. 11. Calculate the Social Security Tax (S.S Tax), which is 6% of the Gross Pay; enter a formula in cell F4 to multiply Gross Pay by 6%. 12. Calculate the Net Pay; enter a formula in cell G4 to subtract Social Security Tax from Gross Pay. 13. Set the work sheet vertically and horizontally on the page. 14. Save your work.
2	Working with Formulas (Maximum, Minimum, Average, Count and Sum). Create the worksheet shown above. 2. Set the column widths as follows: Column A: 8, Column B: 14, Columns C & D: 15, Columns E & F: 14.

	3. Enter the formula to find COMMISSION for the first employee. The commission rate is 2% of sales, COMMISSION = SALES * 2% Copy the formula to the remaining employees. 4. Enter the formula to find TOTAL SALARY for the first employee where: TOTAL SALARY = SALARY + COMMISSION Copy the formula to the remaining employees. 5. Enter formula to find TOTALS, AVERAGE, HIGHEST, LOWEST, and COUNT values. Copy the formula to each column. 6. Format numeric data to include commas and two decimal places. 7. Align all column title labels horizontally and vertically at the center. 8. Create a Header that includes your name in the left section, page number in the center section, and your ID number in the right section. 9. Create the footer with DATE in the left section and TIME in the right section. 10. Create two sheets and generate the consolidated report in third sheet 11. Save the file
3	Working with Sum IF, Counta, Average, and Count IF statements. - Create a worksheet for generating result and implement functions Find average marks of students. Find grade using if clause, condition if average > 15, "A" grade else "B" . Counting total students in class depending on criteria.
4	Consider the problem of preparing a stationary order for the month of March. The item description, quantity and cost per item are available. The total cost per item is to be calculated and the final cost per item involves a sales tax of 2% over the total cost. The gross total and the net total are to be Displayed.
5	Create a worksheet of medal received by different country sports candidates in different sports as browns medal, gold, and silver medal. Display country wise total medals achieved using subtotals.
6	Use of Filter, Advance Filter- Generate a result of BBA, Prepare Award Roll. Filter students scored above 80%, Score 79-60 %, Scored 59 to 40 % and below 40% and make separate lists
7	Generation of Electricity as per criteria
8	Create a worksheet for calculating Income tax related to different slabs Income Tax Slab Tax Rates <₹ 3,00,000 NIL, ₹ 3,00,001 to ₹ 5,00,000, 5%, ₹ 5,00,001 to ₹ 10,00,000 20%, >₹10,00,000 30%
9	Separate First, Middle, and Last Name: You need to split the first, middle, and last name from the full name using a formula. Use the LEFT, SEARCH, MID, RIGHT, LEN, SUBSTITUTE, and FIND functions to solve this problem.
10	Final exam scores from two different biology classes: Class A Class B 91 72

	89 80
	87 72
	75 70
	86 77
	77 64
	85 100
	92 69
	84 83
	77 93
	79 98
	66 73
	90 65
	84 99
	81 84
	72 82
	92 78
	75 68
	81 81
	79 74
	Compute the mean, median, and mode exam score for each class using Excel® spreadsheet functions (AVERAGE, MEDIAN, MODE).
11	Use of Lookup and Hlookup- Find the revenue amount of a Country for some particular Year.
12	Highlight Upcoming Expiry Dates. Excel conditional formatting to highlight payments that are due in the next thirty days. In this example, Due dates are entered in column A. If the date is within the next 30 days, the date is formatted with bold blue font. In column B, a formula (shown below) calculates the number of days away each date is, based on the current date. Make a table – fields date and days
13	Create sale record of different years in different excel sheets and workbooks. Consolidate and create a report in one file.
14	Create a excel sheet for order details having fields Order ID, Product Unit, Price, Quantity, Discount. Calculate and display the following information using appropriate excel functions: 1. Find the cheapest product 2. Find the costliest product 3. Calculate the total quantity of the product with Order ID=10260 4. Count the products with Order ID=10255 5. Count the products with Order ID=10255 and their quantities are greater than 30 and less than 70 6. Count the products with their names beginning with "Ch "Count the products with their unit prices > 40 and their quantities >30 7. Calculate the average of unit prices of products with Order ID =10255
15	The following worksheet contains Names & Sale for 10 salesmen.

	Calculate their bonus as per the following :
	Sale Bonus
	0-30000 0
	30000-40000 3000
	40000-50000 4000
	50000-60000 5000
	60000-70000 6000
	70000-80000 7000
	80000 & above 8000 To calculate BONUS using VLOOKUP
16	Using financial functions, A has invested US $100 in 2016. The payment has been made yearly. The interest rate is 10% p.a. What would be the FV in 2019? FV (Rate, Nper, [Pmt], PV, [Type]).
17	Calculate the future value with the variable interest rate. M has invested the US $100 at the end of 2016. It is expected that the interest rate will change every year. In 2017, 2018 & 2019, the interest rates would be 4%, 6% & 5% respectively. What would be the FV in 2019? FVSCHEDULE = (Principal, Schedule) Make a table – fields date and days
18	Create an inventory system and invoice using multiple sheets. Using Vlookup.
19	What if Analysis, Goal Seek
20	Project Attendance tracking record

ADDITIONAL WEB RESOURCES

1.	By Nptel – Excel https://www.youtube.com/watch?v=uisSkBOGlUM
2.	https://www.youtube.com/watch?v=91I70Xdjglc&list=PL_iwD7O7FG7gbPdddsrBZhD6uM_WLAu0B

LAB REPORT INSTRUCTIONS

- Provide specific title of the lab experiment.
- Theory: Provide a concise abstract (typically 100-200 words) that summarizes the purpose, methods, key findings, and significance of the experiment.
- Materials/ Equipment: List all materials, components, and equipment used in the experiment. Include specifications when applicable.
- Software/Simulation Tools:
- Experimental Procedure: Describe the step-by-step procedure for conducting the experiment. Be detailed and clear in your instructions. Include diagrams or schematics to illustrate the setup, connections, and component placement. Explain any variations or adjustments made to the standard procedure.
- Observation & Calculations/Analysis: Detail the data you collected during the experiment. Include descriptions of measurements and any calculations made. Use tables, charts, or graphs to present data

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clearly. Discuss any trends, patterns, or significant observations. Interpret the data in the context of the experiment's objectives. Ensure that all figures, tables, and equations are correctly labeled.

- Results: Summarize the key findings of the experiment. Present results in a clear and organized manner using tables and graphs. Include units of measurement and labels for data points.

- Conclusion: Provide a concise summary of the experiment's key points and outcomes.

GRADING AND ASSESSMENT

- **Continuous Evaluation**: 30 marks

- **Final Demo & Viva**: 10 marks

- **Attendance**: 10 marks

- **Lab Overall Marks**: 50 marks

COURSE POLICIES

- **Attendance**: Minimum 75% attendance is mandatory to appear in the final examination of the course.

- **Late Submissions**: Manuals and projects must be submitted by the specified timelines

INFORMATION

- **Office Hours**
  Monday (12:05 PM – 12:55 PM)
  Wednesday (12:05 PM – 12:55 PM)

- **Contact Information**
  jagriticse@mietjammu.in

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RUBRICS FOR LAB CONTINUOUS EVALUATION

Parameters	Performance			Marks
	Low	**Medium**	**High**	
Execution of the Experiment	Student was not able to setup and conduct the Experiment completely	Student was able to setup and conduct the experiment but measurement/results/observations were not correct	Students was able to set and conduct the experiment and the measurement/results/observations were not correct	10
	0-2 Marks	3-6 Marks	7-10 Marks	
Record	Student was not able to describe the detailed procedure and could not record the measurement.	Student was able to describe the detailed procedure partially or with some inaccuracy.	Student was able to describe the detailed procedure accurately and record all measurements correctly.	10
	0-2 Marks	3-6 Marks	7-10 Marks	
Viva Voice	Students could not demonstrate sufficient knowledge of foundation, functional or applied aspects related to the experiment during viva.	Students demonstrated sufficient knowledge of foundation, functional or applied aspects related to the experiment during viva.	Students demonstrate strong knowledge of foundation, functional or applied aspects related to the experiment during viva	10
	0-2 Marks	**3-6 Marks**	**7-10 Marks**	
Total Marks				**30**

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