



ST. ALOYSIUS COLLEGE(AUTONOMOUS), JABALPUR

Reaccredited 'A+' Grade by NAAC(CGPA:3.68/4.00)

College with Potential for Excellence by UGC

DST-FIST Supported & STAR College Scheme by DBT

Faculty of Science

Bachelor of Business Administration

SUBJECT: BBA

B.B.A. II Semester

Paper-Elective

Data Analysis using Advance Excel

Course Outcomes

CO. No.	Course Outcomes	Cognitive Level
CO 1	Students will learn fundamental Excel functions and data manipulation techniques.	U, Apply, Analyze
CO 2	Students can learn to introduce charting and visualization methods for data analysis.	K,Apply
CO 3	To explain data validation and conditional formatting for data integrity	U,K
CO 4	To teach advanced Excel techniques such as PivotTables, PivotCharts, and What-If analysis and data consolidation	U, Analyze
CO 5	To cover advanced charting and visualization methods,macros for task automation and efficiency.	U

Credit and Marking Scheme

	Credits	Marks		Total Marks
		Internal	External	
Theory	3	40	60	100
Practical	1	40	60	100
Total	4	200		

Evaluation Scheme

	Marks	
	Internal	External
Theory	3 Internal Exams of 20 Marks (During the Semester) (Best 2 will be taken)	1 External Exams (At the End of Semester)
Practical	3 Internal Exams (During the Semester) (Best 2 will be taken)	1 External Exams (At the End of Semester)





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Content of the Course

Theory

No. of Lectures (in hours per week): 2 Hrs. per week

Total No. of Lectures: 60 Hrs.

Maximum Marks: 60

Units	Topics	No. of Lectures
I	Basic Functions and Data Management: Introduction to Excel functions: SUM, AVERAGE, COUNT. Logical functions: IF, AND, OR for decision-making in formulas. Sorting and filtering: Organizing and analyzing data to identify patterns. Text Functions: Utilizing functions like CONCATENATE, LEFT, RIGHT, MID for text manipulation. Date and Time Functions: Using functions such as TODAY, NOW, DATE, TIME for handling date and time data effectively.	15
II	Charts and Graphs: Creating basic charts: Column, bar, and pie charts to visualize data. Customizing charts: Formatting elements, axes, titles, and legends for clarity. Adding trendlines: Visualizing trends and forecasting future data points.	15
III	Advanced Functions and Analysis: Lookup functions: VLOOKUP, HLOOKUP, INDEX, MATCH for advanced data retrieval. Conditional summing and counting: SUMIF, SUMIFS, COUNTIF, COUNTIFS for targeted analysis. Statistical Functions: Using functions such as MIN, MAX, MEDIAN, and MODE for statistical analysis.	15
IV	Data Validation and Conditional Formatting: Setting validation rules: Controlling data entry and ensuring accuracy. Custom validation criteria: Creating complex validation scenarios for data integrity. Applying conditional formatting: Highlighting trends, patterns, and anomalies in data. Macros and Automation Introduction to macros: Understanding macros and their role in automating tasks. Recording and editing macros: Recording and modifying macros to automate repetitive processes.	15

References

- **Text Books**
 1. Advanced Excel Essentials, Jordan Goldmeier, Apress
 2. Data Analysis with Excel, Manisha Nigam, BPP publications
- **Reference Books**
 1. Advanced Excel Formulas, Murray Alan, Apress
 2. Mastering Advanced Excel, Ritu Arora, BPB





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List of Practical

1. Create a marksheet in MS-Excel and calculate total marks and percentage of all 5 subjects.
2. Create a table student having columns first Name , Last Name , DOB merge first Name and Last Name columns.
3. Create a sales table in MS-Excel showing the monthly sales made by salesman and convert it into bar graph showing legend ,X-Axis , Y-Axis , Chart Title and Numbers over the bars.
4. Create a list of name and marks of two sections apply VLOOKUP function to search for a specific value of name and marks from first column and retrieve the corresponding values from another column.