B.Sc. (Data Science)
Discipline Specific Course (DSC)
Semester I
BSDB31102P: Fundamental of IT Lab

Total Marks: 100
External Marks: 70
Internal Marks: 30
Credits: 2
Pass Percentage: 40%

Besides below given assignment List of Lab Assignments – Session wise will be given to student

Practical List for Word Processor:

1. Create a telephone directory.
    • The heading should be 16-point Arial Font in bold
    • The rest of the document should use 10-point font size
    • Other headings should use 10-point Courier New Font.
    • The footer should show the page number as well as the date last updated.

2. Design a time-table form for your college.
    • The first line should mention the name of the college in 16-point Arial Font and should be bold.
    • The second line should give the course name/teacher's name and the department in 14- point Arial.
    • Leave a gap of 12-points.
    • The rest of the document should use 10-point Times New Roman font.
    • The footer should contain your specifications as the designer and date of creation.
 3. Create the following one page documents.
     (a) Compose a note inviting friends to a get-together at your house, including a list of things to bring with them.
     (b) Design a certificate in landscape orientation with a border around the document.
 4. Create the following document: A newsletter with a headline and 2 columns in portrait orientation, including at least one image surrounded by text.
 5. Prepare a grocery list having four columns (Serial number, the name of the product, quantity and price) for the month of April,
    • Font specifications for Title (Grocery List): 14-point Arial font in bold and italics.
    • The headings of the columns should be in 12-point and bold.
    • The rest of the document should be in 10-point Times New Roman.
    • Leave a gap of 12-points after the title.
6. XYZ Publications plans to release a new book designed as per your syllabus. Design the first page of the book as per the given specifications.
    (a) The title of the book should appear in bold using 20-point Arial font.
    (b) The name of the author and his qualifications should be in the center of the page in 16- point Arial font.
    (c) At the bottom of the document should be the name of the publisher and address in 16- point Times New Roman.
    (d) The details of the offices of the publisher (only location) should appear in the footer.
7. Create the following one page documents. a) Design a Garage Sale sign. b) Make a sign outlining your rules for your bedroom at home, using a numbered list.
8. Enter the following data into a table given on the next page.

Salesperson	Dolls	Trucks	Puzzles
Hardeep Singh	675	536	464
Amitoj Singh	453	853	684
Devinder Singh	754	464	785
Amritpal Singh	875	785	795
Sharanjit Singh	356	854	785

Add a column Region (values: S, N, N, S, S, S) between the Salesperson and Dolls columns to the given table
Sort your table data by Region and within Region by Salesperson in ascending order:

Practical List for Power Point:
1. Create five Power point slides. Each slide should support different format. In these slides explain areas of applications of IT. Make slide transition time as 10 seconds.
2. Create five Power Point slides to give advantages/disadvantages of computer, application of computers and logical structure of computer.
3. Create five Power Point slides detailing the process of internal assessment. It should be a self-running demo.

Practical List for Spreadsheet:
1. Create a student worksheet containing roll numbers, names and total marks. Open a document in Word and insert the excel worksheet using:-i) Copy/Paste ii) Embedding iii) Linking
2. The term wise marks for APS class of 20 students are stored in 3 separate sheets named term1, term2 and term3. Create 4th worksheet that contains student names and their total and average marks for the entire year. Give proper headings using headers. Make the column headings bold and italic. The 4th worksheet should contain college name as the first line. Make it bold, italic and center it.
3. Consider the following facts

Full Name	Grade	F Basic pay	HRA	PF	Gross	Vehicle Allowance

HRA is calculated as follows:

Grade HRA %(of Basic)
1 40%
2 35%
3 30%
Gross = Basic + HRA + VA

Net = Gross –PF

PF is 8% for all Grades
VA is 15000, 10000 and 7000 for Grades 1, 2 and 3.
i) Find max, min and average salary of employees in respective Grade
ii) Count no. of people where VA>HRA
iii) Find out most frequently occurring grade.
iv) Extract records where employee name starts with "A" has HRA>10000
v) Print Grade wise report of all employees with subtotals of net salary and also grand totals. Use subtotal command.

vi) Extract records where Grade is 1 or 2 and salary is between 10000 and 20000 both inclusive.

1. Use Spreadsheet Statistical functions: SUM, COUNT, AVERAGE, MAX, MIN, MEDIAN, MODE PRODUCT SQRT, STDEV.S, ABS, QUARTILE, PERCENTILE, AVERAGEIF, COUNTA, COUNTBLANK, CORREL, Logical operation IF, SUMIF, AVERAGEIF, COUNTIF,
2. Generating inference from Data: Pivot Table, Creating Charts, Data Cleaning: Removing duplicate values, Text to Columns,