Date _____

Expt. No. _____ Page No. 01.

# PART - A : Spreadsheet (Excel)

## Data preprocessing, interpretation and analytical functions

## Data Set :

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | Subject - Wise Workload dataset | | | | | | | |
| 2 | Coll ID | Coll Name | Subject | Full WL | Partial WL | Total WL | WL Type | Concatenate Coll ID |
| 3 | 299 | AKCW299 | Python | 1 | 0 | | | |
| 4 | 4 | AKCW4 | Chemistry | 1 | 0 | | | |
| 5 | | | | | | | | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| 40 | 23 | AKCW23 | Business | 2 | 1 | | | |

## A). Conditional Formatting :

| | D | E |
|---|---|---|
| 2 | Full WL | Partial WL |
| 3 | 1 | 0 |
| 4 | 1 | 0 |
| 5 | 1 | 1 |
| 6 | 4 | 1 |
| 7 | 7 | 0 |
| ⋮ | ⋮ | ⋮ |
| 40 | 2 | 1 |

Date

Expt. No. 01.

Page No. 02.

**01)** Demonstrate Conditional Formatting, IF(), COUNTIF(), SUMIF(), AVERAGE(), CONCATENATE().

**Soln:-** To demonstrate the above mentioned functionalities, we have considered, "Subject wise workload" Sample dataset. This dataset is having 38 Rows and 7 Columns. They are,

- → Coll ID
- → Coll Name
- → Full Workload
- → Partial Workload
- → Total Workload
- → Workload Type
- → Concatenate Coll ID and Coll Name

**A). Conditional Formatting :**

Conditional formatting is used to change the appearance of cells in a range based on your specified conditions.

→ In the considered dataset, Conditional formatting is applied on Full workload (Col D) and partial workload (Col E) columns.

**Step 1 :** Select Col 'D' and Col 'E' data Columns.

**Step 2 :** Go to home Tab → Style Group → Conditional formatting options, click it.

**Step 3 :** From the dropdown, click on the rule you wish to apply highlight the cell → Greater than Condition is "Greater than" >5.

**Step 4 :** Changes are reflected on Col 'D' and Col 'E'.

Horizon

Teacher's Signature

B) IF() Function :

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 2 | Coll ID | Coll Name | Subject | Full WL | Partial WL | Total WL | WL Type | Concatenate Coll ID |
| 3 | 299 | AKCW299 | Python | 1 | 0 | 1 | full + Partial | |
| 4 | 4 | AKCW4 | Chemistry | 1 | 0 | 1 | full + Partial | |
| 5 | | | Python | 1 | 1 | 2 | Only full | |
| 6 | | | | | | | | |
| 7 | | | | | | | | |
| | | | | | | | | |
| 40 | 23 | AKCW23 | Business | 2 | 1 | 3 | Only full | |

C) COUNTIF() function :

1. Number of College offering each subject using COUNTIF().

| | J | K | L |
|---|---|---|---|
| 16 | SL NO | Name | No.of.College |
| 17 | 1 | Chemistry | 3 |
| 18 | 2 | Python | 4 |
| 19 | 3 | Business | 2 |

Date

Expt. No. 01. Page No. 03.

B) IF() Function :

The IF() function is a predefined function in Excel, which returns values based on true or false.
This function is applied on col 'G' -> for finding the workload Type (WL Type).

Syntax :-=IF(logical_test, [value_if_true], [value_if_false])

Where, • logical_test = Condition.
• Value_if_true = Statement display if Condition is true.
• Value_if_false = Statement display if Condition is false.

Example :=IF(E3:E40, "Only Full", "Full + Partial")

C) COUNTIF() Function :

The COUNTIF() function in Excel Counts the number of cells within a range based on Pre-defined Criteria.

Syntax :-=COUNTIF (range, criteria)

where, • range = define 1 or more cells to Count.
• Criteria = The Condition that tells the function, which cells to Count.

Horizon

Teacher's Signature

D) SUMIF() function :

| | F | K |
|---|---|---|
| 2 | Total WL | SUMIF |
| 3 | 1 | 2 |
| 4 | 1 | 17 |
| 5 | 2 | 0 |
| 6 | 5 | 12 |
| 7 | 7 | 19 |
| ⋮ | ⋮ | ⋮ |
| 40 | 3 | 4 |

E) AVERAGE() function :

| | D | E | L |
|---|---|---|---|
| 2 | Full WL | Partial WL | AVerage() |
| 3 | 1 | 0 | 0.5 |
| 4 | 1 | 0 | 2.5 |
| 5 | 1 | 1 | 1 |
| 6 | 4 | 1 | 3.5 |
| 7 | 7 | 0 | |
| ⋮ | ⋮ | ⋮ | ⋮ |
| 40 | 2 | 1 | |

Date

Expt. No. 01 Page No. 04.

Example :-=COUNTIF(C3:C40, 14:16)

D) SUMIF() Function :

The SUMIF() is a pre-defined function in Excel, which calculates the sum of values in a range based on a True or false condition.

Syntax :-=SUMIF(range, criteria, [sum_range])

Where, • range = range of data to apply SUMIF()
• Criteria = which can check thing like =, <, >.
• [sum_range] = The range where the function calculates the sum.

Example :-
=SUMIF(F3:F40, "<2")
=SUMIF(F3:F40, ">1"), =SUMIF(F3:F40, "<=2")

E) AVERAGE() Function :

The AVERAGE() function is a premade function in Excel, which calculates the average (arithmetic mean).
It adds the range and divides it by the number of observations.

Syntax :-=AVERAGE(number1, [number2], ...)

Example :-=AVERAGE(D3, E3), =AVERAGE(D6, E6), =AVERAGE(D5, E5), =AVERAGE(D7, E7)

Horizon

Teacher's Signature

## F) CONCATENATE() Function:

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 2 | Coll ID | Coll Name | Subject | Full WL | Partial WL | Total WL | WL Type | Concatenate() Coll ID & WL TYPE |
| 3 | 299 | AKCW299 | Python | 1 | 0 | 1 | Full + Partial | 299/Full+ Partial |
| 4 | 4 | AKCW4 | Chemistry | 1 | 0 | 1 | Full + Partial | 4/Full+ Partial |
| ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ | ⋮ |
| 40 | 23 | AKCW23 | Business | 2 | 1 | 3 | Only full | 23/Only full |

Date

Expt. No. 01 Page No. 05

F) CONCATENATE() function :

The concatenate is just another way of saying "to combine" or "to join together".

Syntax :- =Concatenate (text 1, [text 2], ...)

where, • text 1 = The first item to join (text, Value, number, Cell reference).

• text 2 = Combine with text 1

Example :- =CONCATENATE (A3, "/", G3)
=CONCATENATE (A4, "/", G4)
=CONCATENATE (A40, "/", G40)

Horizon

Teacher's Signature

A) LEFT() Function :

| | C | I |
|---|---|---|
| 2 | Subject | LEFT() |
| 3 | Python | Py |
| 4 | Chemistry | Chem |

B) MID() Function :

| | C | K |
|---|---|---|
| 2 | Subject | MID() |
| 4 | Chemistry | hemis |
| 7 | Python | thon |

Date

Expt. No. 02. Page No. 06.

Q2) Demonstrate LEFT, MID, RIGHT, LEN, SUBSTITUTE, SEARCH, ISNUMBER.

A) LEFT() Function :

The 'LEFT' function is used to extract a specified number of characters from the beginning (left side) of a text string.

Syntax :

=LEFT(text, num_chars)

where, • text : This is the text string from which you want to extract characters.

• num_chars : This is the number of characters you want to extract from the left side of the text.

Example :- =LEFT(C3, 2), =LEFT(C4, 4)

B) MID() Function :

The MID() function is used to extract a specific number of characters from a text string, starting at a specified position.

Syntax :- =MID(text, Start_num, num_chars)

where, • text : This is the text string from which you want to extract characters.

• Start_num : This is the starting position in the text string from which you want to begin extraction.

• num_chars : This is the number of characters you want to extract.

Example :- =MID(C4, 2, 5), =MID(C7, 3, 5)

Horizon

Teacher's Signature

C) RIGHT() Function :

| | C | J |
|---|---|---|
| 2 | Subject | RIGHT() |
| 3 | Python | on |
| 4 | Chemistry | stry |

D) LEN() Function :

| | C | L |
|---|---|---|
| 2 | Subject | LEN() |
| 3 | Python | 6 |
| 4 | Chemistry | 9 |

Date

Expt. No. 02. Page No. 07

C) RIGHT() Function :

The 'RIGHT()' function in Excel is used to extract a specified number of characters from the right side of a text string.

Syntax :- =RIGHT(text, num_chars)

Where, • text = The text string you want to extract from,

• num_chars = is the number of characters you want to retrieve from the right end of the text.

Example :- =RIGHT(C3,2), =RIGHT(C4,4)

D) LEN() Function :

The 'LEN()' Function in Excel is used to count the number of characters in a text string.

Syntax :- =LEN(text)

Where., • text = The text string for which you want to determine the length.

Example :- =LEN(C3), =LEN(C4)

E) SUBSTITUTE() Function :

The 'SUBSTITUTE()' function is used to replace occurrences of a specified substring with another substring in a given text string.

Syntax :- =SUBSTITUTE(text, old_text, new_text, [instance_num])

Horizon Teacher's Signature

E) SUBSTITUTE() Function :

| | C | M |
|---|---|---|
| 2 | Subject | SUBSTITUTE() |
| 6 | Computer sci | Computer applications |
| 3 | Python | java |

F) SEARCH() Function :

| | C | N |
|---|---|---|
| 2 | Subject | SEARCH() |
| 3 | Python | 2 |
| 4 | Chemistry | 4 |

Date

Expt. No. 02. Page No. 08.

Where., • text = The original text string where you want to replace occurrences.
• old_text = The substring you want to replace.
• new_text = The new substring that will replace 'old_text'.
• [instance_num] = (optional) : Specifies which occurrence of 'old text' to replace.

Example : =SUBSTITUTE(C6, "sci", "applications")
=SUBSTITUTE(C3, "Python", "java")

F) SEARCH() Function :

SEARCH() will return the position of a specified character or sub-string within a supplied text string.

Syntax : =SEARCH(find_text, within_text, [start_num])

Where., • find_text = The text you want to find.
• within_text = The text containing the data you want to search.
• [start_num] = (optional) : The starting number for the search within the 'within_text'.

Example : =SEARCH("m", C4), =SEARCH("y", C3)

G) ISNUMBER() FUNCTION :

The 'ISNUMBER()' function is used to check if a cell contains a numeric Value.

Horizon

Teacher's Signature

## G) ISNUMBER() Function :

| | A | C | O |
|---|---|---|---|
| 2 | CollID | Subject | ISNUMBER() |
| 3 | 299 | | TRUE |
| 5 | | Python | FALSE |

Date

Expt. No. 02

Page No. 09

It returns TRUE if the cell's content is a number and FALSE if it is not.

Syntax : =ISNUMBER(Value)

Where., • Value = The Value or cell reference you want to check.

Example : =ISNUMBER(A3)
=ISNUMBER(C5)

Horizon

Teacher's Signature

A) TODAY() Function :

= TODAY()

· 17-12-2023

B) NOW() Function :

= NOW()

· 17-12-23 19:24

C) YEAR() Function :

= YEAR(Serial_number)

= YEAR("17-Dec-23")

· 2023

Date

Expt. No. 03. Page No. 10.

03) Demonstrate TODAY, NOW, YEAR, MONTH, NETWORKDAYS, EOMONTH

A) TODAY() Function :

In Excel, the 'TODAY()' function returns the current date.

Syntax : =TODAY()

Where, 'TODAY()' in a cell, it will display the current date. This date will automatically update every time you open or recalculate the spreadsheet.

Example : =TODAY()

B) NOW() Function :

In Excel, the 'NOW()' function is used to return the current date and time.

Syntax : =NOW()

Simply enter this formula in a cell, and it will display the current date and time.

Example : =NOW()

C) YEAR() Function :

The 'YEAR()' function is used to extract the year from a date.

Syntax : =YEAR(Serial_number)

where., Serial_number : This is the date from which you want to extract the Year.

Example :- =YEAR("17-Dec-23")

Horizon

Teacher's Signature

D) MONTH() Function :

= MONTH("17-Dec-23")

. 12

E) NETWORKDAYS() Function :

= NETWORKDAYS("2-oct-23", "31-dec-23")

. 65

= NETWORKDAYS("2-oct-23", "31-dec-23", "01-NOV-23": "25-Dec-23")

. 63

Expt. No. 03. Page No. 11 Date

D) MONTH() Function :

The 'MONTH()' function is used to extract the month from a date.

Syntax :- =MONTH(serial_number)

where., • Serial_number : This is the date from which you want to extract the month.

Example : =MONTH("17-Dec-23")

E) NETWORKDAYS() Function :

The 'NETWORKDAYS()' function is used to calculate the number of whole workdays (Monday through Friday) between two dates, excluding specified holidays.

Syntax : =NETWORKDAYS(start_date, end_date, [holidays])

where., start_date : The start date of the period.

end_date : The end-date of the Period.

[holidays] : Optional Parameter where you can specify a range of cells containing holiday dates.

Example : =NETWORKDAYS("2-oct-23", "31-dec-23")

=NETWORKDAYS("2-oct-23", "31-dec-23", "01-NOV-23": "25-Dec-23")

F) EOMONTH() Function :

The 'EOMONTH()' function in Excel returns the serial number for the last day of the month that is a specified number of months

Horizon Teacher's Signature

## F) EOMONTH() Function :

| | A | B |
|---|---|---|
| 1 | Start date | EOMONTH() |
| 2 | 26-Jan-16 | 42429 |
| 3 | 1-Apr-23 | 45169 |
| 4 | 18-Aug-23 | 45138 |
| 5 | 10-Nov-23 | 45199 |

☆ After Converting Cell B Values to Date format :

| | A | B |
|---|---|---|
| 1 | Start date | EOMONTH() |
| 2 | 26-Jan-16 | 29-02-16 |
| 3 | 1-Apr-23 | 31-08-23 |
| 4 | 18-Aug-23 | 31-07-23 |
| 5 | 10-Nov-23 | 30-09-2023 |

Date

Expt. No. 03. Page No. 12

before or after a specified date.

Syntax :- =EOMONTH(Start_date, months)

where, Start_date : The initial date.

months : The number of months before or after the start_date.

A positive Value for months yields a future date, & a negative Value yields a Past date.

Example : =EOMONTH(A2, 1), =EOMONTH(A3, 4)
=EOMONTH(A4, -1), =EOMONTH(A5, -2)

⇒ STEPS TO CONVERT A VALUES TO DATE FORMAT :-

1) Step 1 : Once you get your Values, Right click on the particular cell.
2) Step 2 : Click on Format Cell.
3) Step 3 : Under the Category Cell, Select as Date.
4) Step 4 : Then, Select the type of format you want. for example, DD-MM-YY or YY-MM-DD.
5) Step 5 : Click on OK. Then you will be getting the Date format.

Horizon

Teacher's Signature

A) VLOOKUP( ) Function :

| A | B | C | E | F |
|---|---|---|---|---|
| Name | Date | Value | | VLOOKUP |
| a | 01-01-2022 | 1 | C | 3 |
| b | 26-01-2022 | 2 | | |
| c | 22-02-2022 | 3 | | |
| d | 23-02-2022 | 4 | | |
| e | 11-03-2022 | 5 | | |
| f | 14-03-2023 | 6 | | |
| g | 25-03-2023 | 7 | | |
| h | 28-03-2023 | 8 | | |

B) HLOOKUP() Function :

| A | B | C | E | F |
|---|---|---|---|---|
| Name | Date | Value | | HLOOKUP |
| a | 01-01-2022 | 1 | | |
| b | 26-01-2022 | 2 | Date | 14-03-2023 |
| c | 22-02-2022 | 3 | | |
| d | 23-02-2022 | 4 | | |
| e | 11-03-2022 | 5 | | |
| f | 14-03-2023 | 6 | | |
| g | 25-03-2023 | 7 | | |
| h | 28-03-2023 | 8 | | |

Date

Expt. No. 04. Page No. 13

04) Demonstrate VLOOKUP, HLOOKUP, XLOOKUP, COUNT, COUNTA.

A) VLOOKUP( ) Function :

Looks for a value in the leftmost column of a table, and then return a value in the same row from a column you specify.

Syntax : =VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

Example : =VLOOKUP(E44, A43:C51, 3, FALSE)

B) HLOOKUP( ) Function :

Looks for a value in the top row or array of values and returns the value in the same column from a row you specify.

Syntax : =HLOOKUP(lookup_value, table_array, row_index_num, [range_lookup])

Example : =HLOOKUP(E45, A43:C51, 7, FALSE)

Horizon

Teacher's Signature

c) XLOOKUP() Function :

| | C | D | E | F |
|---|---|---|---|---|
| 43 | Value | Value | | XLOOKUP |
| 44 | 1 | 56 | | 14-03-2023 |
| 45 | 2 | 22 | | |
| 46 | 3 | 13 | 88 | 11-03-2022 |
| 47 | 4 | 14 | 62 | |
| 48 | 5 | 66 | | |
| 49 | 6 | 102 | | |
| 50 | 7 | 36 | | |
| 51 | 8 | 1 | | |

D) COUNT()  E) COUNTA()

| | A | C | G | H |
|---|---|---|---|---|
| 43 | Name | Value | COUNT | COUNTA |
| 44 | a | 1 | 8 | 9 |
| 45 | b | 2 | | |
| 46 | c | 3 | 0 | 9 |
| 47 | d | 4 | | |
| 48 | e | 5 | | |
| 49 | f | 6 | | |
| 50 | g | 7 | | |
| 51 | h | 8 | | |

Date

Expt. No. 04.  Page No. 14

c) XLOOKUP() Function :

Searches a range or an array for a match and returns the corresponding item from a second range or array, by default, an exact match is used.

Syntax : =XLOOKUP(lookup_value, lookup_array, return_array, [if_not_found], [match_mode], [search_mode])

Example : =XLOOKUP(E46, D43:D51, B43:B51, "NOT FOUND", 1, 1)

=XLOOKUP(E47, D43:D51, B43:B51, "NOT FOUND", 1, 1)

D) COUNT() Function :

Counts the number of cells in a range that contain numbers

Syntax : =COUNT(Value 1, [Value 2], ....)

Example : =COUNT(C43:C51)

=COUNT(A43:A51)

E) COUNTA() Function :

Counts the number of cells in a range that are not empty.

Syntax : =COUNTA(Value 1, [Value 2], ....)

Example : =COUNTA(C43:C51)

=COUNTA(A43:A51)

Horizon

Teacher's Signature

A) INDEX() function :

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | 1 | 2 | 3 | Index |
| 2 | 1 | name | Height | Weight | |
| 3 | 2 | Sally | 6.2 | 185 | 5.8 |
| 4 | 3 | tom | 5.9 | 170 | 210 |
| 5 | 4 | Kevin | 5.8 | 175 | |
| 6 | 5 | Amanda | 5.5 | 145 | |
| 7 | 6 | Carl | 6.1 | 210 | |
| 8 | 7 | Ned | 6 | 180 | |

B) MATCH() function :

| | A | B | C | D | F | G |
|---|---|---|---|---|---|---|
| 1 | | 1 | 2 | 3 | Match | |
| 2 | 1 | name | Height | Weight | | |
| 3 | 2 | Sally | 6.2 | 185 | 7 | Exact match |
| 4 | 3 | Tom | 5.9 | 170 | 1 | Greater Value |
| 5 | 4 | Kevin | 5.8 | 175 | 4 | Lesser Value |
| 6 | 5 | Amanda | 5.5 | 145 | | |
| 7 | 6 | Carl | 6.1 | 210 | | |
| 8 | 7 | Ned | 6 | 220 | | |

Expt. No. 05. Date

Page No. 15.

05 Demonstrate INDEX, MATCH, UNIQUE, COUNTIFS, SUMIFS, AVERAGEIFS.

A) INDEX() Function :

The INDEX() function returns a value or the reference to a value from within a table or range.

Syntax : =INDEX(array, row_num, [column_num])

Example : =INDEX(B2:D8, 4, 2)
=INDEX(B2:D8, 6, 3)

B) MATCH() Function :

The MATCH() function searches for a specified item in a range of cells, and then returns the relative position of that item in the range.

Syntax : =MATCH(lookup_value, lookup_array, [match_type])

Example : =MATCH(B8, B2:B8, 0)
=MATCH(175, D3:D8, -1)
=MATCH(180, D3:D8, 1)

C) UNIQUE() Function :

The UNIQUE() function in Excel returns a list of unique values from a range or array.

Horizon

Teacher's Signature

C) UNIQUE() Function :

| | A | B | G |
|---|---|---|---|
| 1 | | 1 | 4 |
| 2 | 1 | name | unique |
| 3 | 2 | Sally | Sally |
| 4 | 3 | tom | tom |
| 5 | 4 | Kevin | Kevin |
| 6 | 5 | Amanda | Amanda |
| 7 | 6 | Carl | Carl |
| 8 | 7 | ned | ned |
| 9 | 8 | Kevin | |
| 10 | 9 | Amanda | |
| 11 | 10 | Carl | |
| 12 | 11 | tom | |
| 13 | 12 | Sally | |
| 14 | 13 | ned | |
| 15 | 14 | Carl | |

Expt. No. 05. Date

Page No. 16.

Syntax : =UNIQUE(array, [by_col], [exactly_once])

Example : =UNIQUE(B3:B15)

D) COUNTIFS() Function :

The COUNTIFS() Function is a premade function in Excel, which counts cells in a range based on one or more true or false condition.

Syntax : =COUNTIFS(criteria_range1, Criteria1, [criteria_range2, criteria2],...)

Example : =COUNTIFS(B3:B15, "Carl", C3:C15, "=5", D3:D15, ">100")

Horizon

Teacher's Signature

## D) COUNTIFS() function :

| | A | B | C | D | F |
|---|---|---|---|---|---|
| 1 | | 1 | 2 | 3 | |
| 2 | 1 | name | height | Weight | Countifs |
| 3 | 2 | Sally | 6.2 | 185 | |
| 4 | 3 | tom | 5.9 | 170 | 2 |
| 5 | 4 | Kevin | 5.8 | 175 | |
| 6 | 5 | Amanda | 5.5 | 145 | |
| 7 | 6 | Carl | 6.1 | 210 | |
| 8 | 7 | ned | 6 | 220 | |
| 9 | 8 | Kevin | 5.8 | 175 | |
| 10 | 9 | Amanda | 6 | 180 | |
| 11 | 10 | Carl | 5 | 165 | |
| 12 | 11 | tom | 5.1 | 145 | |
| 13 | 12 | Sally | 5.3 | 150 | |
| 14 | 13 | ned | 5 | 190 | |
| 15 | 14 | Carl | 5 | 110 | |



## E) SUMIFS() Function :

The SUMIFS() Function, adds all of its arguments that meet multiple criteria.

Syntax : =SUMIFS(sum_range, criteria_range1, criteria1, [criteria_range2, criteria2], ...)

Example : =SUMIFS(D3:D15, B3:B15, "Carl", C3:C15, "=5")

E) SUMIFS()

F) AVERAGEIFS()

| ▲ | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | | 1 | 2 | 3 | | |
| 2 | 1 | name | height | weight | Sumifs | Averageifs |
| 3 | 2 | Sally | 6.2 | 185 | | |
| 4 | 3 | tom | 5.9 | 170 | 275 | 161.6667 |
| 5 | 4 | Kevin | 5.8 | 175 | | |
| 6 | 5 | Amanda | 5.5 | 145 | | |
| 7 | 6 | Carl | 6.1 | 210 | | |
| 8 | 7 | ned | 6 | 220 | | |
| 9 | 8 | Kevin | 5.8 | 175 | | |
| 10 | 9 | Amanda | 6 | 180 | | |
| 11 | 10 | Carl | 5 | 165 | | |
| 12 | 11 | tom | 5.1 | 145 | | |
| 13 | 12 | Sally | 5.3 | 150 | | |
| 14 | 13 | ned | 5 | 190 | | |
| 15 | 14 | Carl | 5 | 110 | | |

Date

Expt. No. 05.

Page No. 18

F) AVERAGEIFS() Function :

The averageifs function, which calculates the average of a range based on one or more true or false condition.

Syntax : =AVERAGEIFS(average_range, Criteria_range1, criteria1, ...)

Example : =AVERAGEIFS(D3:D15, B3:B15, "Carl", D3:D15, ">0")

Horizon

Teacher's Signature