

**Math & Trig** → Even, Fact, ODD, Power, Roman, SQRT, SUM, SUMIF, INT, MOD, Round.

**Date & Time** → Today, Now, Date, Day, Month, Year, Time, Hour, Minute, Second.

**Text** → Lower, Proper, UPPER, Left, Right, Mid, Len, Concatenate, Exact, Trim.

**Statistical** → Average, AverageA, Count Function, Max, Min, Mode.

**Lookup & Reference** → Hyperlink, IFERROR, V Lookup, H Lookup and Match.

**Logical** → AND, OR, NOT, IF.

**Financial** → FV, PMT, IPMT, PPMT.

**Financial**

**Ms-Excel All Function Full Playlist Available  
on YouTube Channel UPCISS**

**Free Online Computer Classes on  
YouTube Channel UPCISS  
[www.youtube.com/upciss](http://www.youtube.com/upciss)**





B3    ✕   ✓   *f<sub>x</sub>*    =ODD(A3)

|   | A             | B             | C |
|---|---------------|---------------|---|
| 1 |               | <b>ODD</b>    |   |
| 2 | <b>Number</b> | <b>Result</b> |   |
| 3 | 5             | 5             |   |
| 4 | 8             | 9             |   |
| 5 | 3             | 3             |   |

C3    ✕   ✓   *f<sub>x</sub>*    =POWER(A3,B3)

|   | A             | B            | C             |
|---|---------------|--------------|---------------|
| 1 |               | <b>Power</b> |               |
| 2 | <b>Number</b> | <b>power</b> | <b>Result</b> |
| 3 | 5             | 3            | 125           |
| 4 | 6             | 2            | 36            |
| 5 | 3             | 4            | 81            |

|    |        |        |   |                      |            |
|----|--------|--------|---|----------------------|------------|
| B3 | :      | ✕      | ✓ | <i>f<sub>x</sub></i> | =ROMAN(A3) |
|    | A      | B      | C |                      |            |
| 1  |        | Roman  |   |                      |            |
| 2  | Number | Result |   |                      |            |
| 3  | 5      | V      |   |                      |            |
| 4  | 45     | XLV    |   |                      |            |
| 5  | 8      | VIII   |   |                      |            |

|    |        |   |              |              |                                 |           |
|----|--------|---|--------------|--------------|---------------------------------|-----------|
| B3 |        | : | <div>✕</div> | <div>✓</div> | <div><i>f<sub>x</sub></i></div> | =SQRT(A3) |
|    |        | A | B            | C            |                                 |           |
| 1  |        |   | SQRT         |              |                                 |           |
| 2  | Number |   | Result       |              |                                 |           |
| 3  | 64     |   | 8            |              |                                 |           |
| 4  | 144    |   | 12           |              |                                 |           |
| 5  | 49     |   | 7            |              |                                 |           |

|     |        |             |   |             |  |  |  |
|-----|--------|-------------|---|-------------|--|--|--|
| SUM |        |             |   | =SUM(A3:A6) |  |  |  |
|     | A      | B           | C |             |  |  |  |
| 1   |        | SUM         |   |             |  |  |  |
| 2   | Number | Result      |   |             |  |  |  |
| 3   | 77     | 187         |   |             |  |  |  |
| 4   | 36     | =SUM(A3:A6) |   |             |  |  |  |
| 5   | 49     |             |   |             |  |  |  |
| 6   | 25     |             |   |             |  |  |  |

|    |         |       |         |       |                        |  |  |  |  |
|----|---------|-------|---------|-------|------------------------|--|--|--|--|
| D4 |         |       |         |       | =SUMIF(A3:A6,C4,B3:B6) |  |  |  |  |
|    | A       | B     | C       | D     |                        |  |  |  |  |
| 1  |         | SUMIF |         |       |                        |  |  |  |  |
| 2  | City    | Amt.  | Result  |       |                        |  |  |  |  |
| 3  | Sitapur | 4500  | City    | Total |                        |  |  |  |  |
| 4  | Mumbai  | 3600  | Sitapur | 7000  |                        |  |  |  |  |
| 5  | Sitapur | 2500  |         |       |                        |  |  |  |  |
| 6  | Mumbai  | 15000 |         |       |                        |  |  |  |  |

B3    :    ✕    ✓    *f<sub>x</sub>*    =INT(A3)

|   | A             | B             |
|---|---------------|---------------|
| 1 |               | <b>INT</b>    |
| 2 | <b>Number</b> | <b>Result</b> |
| 3 | 45.378        | 45            |
| 4 | 25.96         | 25            |
| 5 | 48.963        | 48            |

C3    :    ✕    ✓    *f<sub>x</sub>*    =MOD(A3,B3)

|   | A                  | B              | C             |
|---|--------------------|----------------|---------------|
| 1 |                    | <b>MOD</b>     |               |
| 2 | <b>Denominator</b> | <b>Divisor</b> | <b>Result</b> |
| 3 | 44                 | 8              | 4             |
| 4 | 39                 | 3              | 0             |
| 5 | 26                 | 6              | 2             |

B3    X    ✓    *fx*    =ROUND(A3,0)

|   | A             | B             | C |
|---|---------------|---------------|---|
| 1 | <b>Round</b>  |               |   |
| 2 | <b>Number</b> | <b>Result</b> |   |
| 3 | 25.365        | 25            |   |
| 4 | 26.84         | 27            |   |
| 5 | 23            | 23            |   |

### Date & Time...

B2    X    ✓    *fx*    =TODAY()

|   | A             | B            |
|---|---------------|--------------|
| 1 |               | <b>Today</b> |
| 2 | <b>Result</b> | 8/30/2018    |

B2    X    ✓    *fx*    =NOW()

|   | A             | B              |
|---|---------------|----------------|
| 1 |               | <b>Now</b>     |
| 2 | <b>Result</b> | 8/30/2018 5:27 |

|     |        |   |                  |                                       |   |  |  |
|-----|--------|---|------------------|---------------------------------------|---|--|--|
| SUM |        |   |                  | : X ✓ f <sub>x</sub> =DATE(2018,8,30) |   |  |  |
|     |        | A | B                |                                       | C |  |  |
| 1   |        |   | Date             |                                       |   |  |  |
| 2   | Result |   | 8/30/2018        |                                       |   |  |  |
| 3   |        |   | =DATE(2018,8,30) |                                       |   |  |  |

|    |                    |   |           |                               |  |  |  |
|----|--------------------|---|-----------|-------------------------------|--|--|--|
| B3 |                    |   |           | : X ✓ f <sub>x</sub> =DAY(B2) |  |  |  |
|    |                    | A | B         |                               |  |  |  |
| 1  | Day , Month , Year |   |           |                               |  |  |  |
| 2  | Date               |   | 8/30/2018 |                               |  |  |  |
| 3  | Day                |   | 30        |                               |  |  |  |
| 4  | Month              |   | 8         |                               |  |  |  |
| 5  | Year               |   | 2018      |                               |  |  |  |

|     |        |   |                |                                     |   |  |  |
|-----|--------|---|----------------|-------------------------------------|---|--|--|
| SUM |        |   |                | : X ✓ f <sub>x</sub> =TIME(18,9,12) |   |  |  |
|     |        | A | B              |                                     | C |  |  |
| 1   |        |   | Time           |                                     |   |  |  |
| 2   | Result |   | 6:09 PM        |                                     |   |  |  |
| 3   |        |   | =TIME(18,9,12) |                                     |   |  |  |

|    |                        |            |  |
|----|------------------------|------------|--|
| B3 |                        | =HOUR(B2)  |  |
|    | A                      | B          |  |
| 1  | Hour , Minute , Second |            |  |
| 2  | Time                   | 6:20:57 AM |  |
| 3  | Hour                   | 6          |  |
| 4  | Minute                 | 20         |  |
| 5  | Second                 | 57         |  |

Text...

|    |                        |            |        |        |
|----|------------------------|------------|--------|--------|
| B3 |                        | =LOWER(A3) |        |        |
|    | A                      | B          | C      | D      |
| 1  | Lower , Proper , UPPER |            |        |        |
| 2  | Name                   | Lower      | Proper | UPPER  |
| 3  | Rahul                  | rahul      | Rahul  | RAHUL  |
| 4  | arvind                 | arvind     | Arvind | ARVIND |
| 5  | SURESH                 | suresh     | Suresh | SURESH |

B3

:

✕

✓

fx

=LEFT(A3,3)

|   |                    |          |       |     |
|---|--------------------|----------|-------|-----|
|   | A                  | <b>B</b> | C     | D   |
| 1 | Left , Right , Mid |          |       |     |
| 2 | Name               | Left     | Right | Mid |
| 3 | Rahul              | Rah      | ul    | hu  |
| 4 | arvind             | arv      | nd    | vi  |
| 5 | SURESH             | SUR      | SH    | RE  |

|    |          |   |                                                                                   |                                                                                   |                                                                                   |          |
|----|----------|---|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------|
| B3 |          | : |  |  |  | =LEN(A3) |
|    |          | A | B                                                                                 |                                                                                   |                                                                                   |          |
| 1  |          |   | Len                                                                               |                                                                                   |                                                                                   |          |
| 2  | Name     |   | Result                                                                            |                                                                                   |                                                                                   |          |
| 3  | Rahul    |   | 5                                                                                 |                                                                                   |                                                                                   |          |
| 4  | Shyam    |   | 5                                                                                 |                                                                                   |                                                                                   |          |
| 5  | Surendra |   | 8                                                                                 |                                                                                   |                                                                                   |          |

|    |                    |                  |                |                         |
|----|--------------------|------------------|----------------|-------------------------|
| C3 |                    |                  |                | =CONCATENATE(A3," ",B3) |
|    | A                  | B                | C              |                         |
| 1  | <b>Concatenate</b> |                  |                |                         |
| 2  | <b>First Name</b>  | <b>Last Name</b> | <b>Result</b>  |                         |
| 3  | Rahul              | verma            | Rahul verma    |                         |
| 4  | Shyam              | Gupta            | Shyam Gupta    |                         |
| 5  | Surendra           | Singh            | Surendra Singh |                         |

|    |                   |               |  |                    |
|----|-------------------|---------------|--|--------------------|
| B3 |                   |               |  | =EXACT(A3,"Rahul") |
|    | A                 | B             |  |                    |
| 1  | <b>EXACT</b>      |               |  |                    |
| 2  | <b>First Name</b> | <b>Result</b> |  |                    |
| 3  | Rahul             | TRUE          |  |                    |
| 4  | RAHUL             | FALSE         |  |                    |
| 5  | Rahul             | TRUE          |  |                    |
| 6  | rahul             | FALSE         |  |                    |





|    |                         |            |            |             |  |
|----|-------------------------|------------|------------|-------------|--|
| B3 |                         |            |            |             |  |
|    | A                       | <b>B</b>   | C          | D           |  |
| 1  | <b>Max , Min , Mode</b> |            |            |             |  |
| 2  | <b>Number</b>           | <b>Max</b> | <b>Min</b> | <b>Mode</b> |  |
| 3  | 1                       | 8          | 1          | 4           |  |
| 4  | 4                       |            |            |             |  |
| 5  | 8                       |            |            |             |  |
| 6  | 7                       |            |            |             |  |
| 7  | 4                       |            |            |             |  |

### Lookup & Reference..

|    |                  |                       |   |   |  |
|----|------------------|-----------------------|---|---|--|
| B3 |                  |                       |   |   |  |
|    | A                | <b>B</b>              | C | D |  |
| 1  | <b>Hyperlink</b> |                       |   |   |  |
| 2  |                  |                       |   |   |  |
| 3  | Link             | <a href="#">Notes</a> |   |   |  |

|     |   |               |                |               |               |                   |
|-----|---|---------------|----------------|---------------|---------------|-------------------|
| D11 |   |               |                |               |               |                   |
|     | A | B             | C              | D             | E             | F                 |
| 1   |   |               | <b>VLOOKUP</b> |               |               |                   |
| 2   |   |               |                |               |               |                   |
| 3   |   | <b>Stu.ID</b> | <b>Name</b>    | <b>Course</b> | <b>Age</b>    | <b>Batch Time</b> |
| 4   |   | UPCI0253      | Arvind         | CTTC          | 26            | 8 To 10           |
| 5   |   | UPCI0254      | Rahul          | ADCA          | 23            | 10 To 11          |
| 6   |   | UPCI0255      | Suresh         | DCA           | 20            | 11 To 12          |
| 7   |   | UPCI0256      | Ramesh         | CTTC          | 25            | 8 To 10           |
| 8   |   | UPCI0257      | Harsh          | ADCA          | 23            | 10 To 11          |
| 9   |   |               |                |               |               |                   |
| 10  |   |               | <b>Stu.ID</b>  | <b>Name</b>   | <b>Course</b> | <b>Batch Time</b> |
| 11  |   |               | UPCI0255       | Suresh        | DCA           | 11 To 12          |

|     |   |                            |                  |                  |                  |                   |
|-----|---|----------------------------|------------------|------------------|------------------|-------------------|
| C11 |   |                            |                  |                  |                  |                   |
|     | A | B                          | C                | D                | E                | F                 |
| 1   |   | <b>HLOOKUP &amp; MATCH</b> |                  |                  |                  |                   |
| 2   |   |                            |                  |                  |                  |                   |
| 3   |   | <b>Name</b>                | <b>Sale Jan.</b> | <b>Sale Feb.</b> | <b>Sale Mar.</b> | <b>Sale April</b> |
| 4   |   | Arvind                     | 1788             | 1506             | 2653             | 2531              |
| 5   |   | Rahul                      | 2386             | 2912             | 2842             | 2379              |
| 6   |   | Suresh                     | 2859             | 2956             | 2095             | 2066              |
| 7   |   | Ramesh                     | 1708             | 1527             | 2029             | 2098              |
| 8   |   | Harsh                      | 2939             | 2835             | 2567             | 1796              |
| 9   |   |                            |                  |                  |                  |                   |
| 10  |   |                            | <b>Sale mar.</b> |                  |                  |                   |
| 11  |   | Harsh                      | 2567             |                  |                  |                   |

### Logical..

| Comparison Operator | Meaning                  |
|---------------------|--------------------------|
| =                   | Equal to                 |
| <>                  | Not Equal to             |
| >                   | Greater then             |
| <                   | Less then                |
| >=                  | Greater then or equal to |
| <=                  | Less then or equal to    |

|    |   |             |               |                      |                         |
|----|---|-------------|---------------|----------------------|-------------------------|
| D4 | : | x           | ✓             | <i>f<sub>x</sub></i> | =AND(C4>=2000,C4<=2500) |
|    | A | B           | C             | D                    |                         |
| 1  |   |             | <b>AND</b>    |                      |                         |
| 2  |   |             |               |                      |                         |
| 3  |   | <b>Name</b> | <b>Salary</b> | <b>Result</b>        |                         |
| 4  |   | Mohan       | 2000          | TRUE                 |                         |
| 5  |   | Kishor      | 1800          | FALSE                |                         |
| 6  |   | Lalit       | 3000          | FALSE                |                         |
| 7  |   | Anoop       | 2500          | TRUE                 |                         |
| 8  |   | Rahul       | 2400          | TRUE                 |                         |

| D3 |   |             |                      | =OR(C3="high school",C3="inter") |
|----|---|-------------|----------------------|----------------------------------|
|    | A | B           | C                    | D                                |
| 1  |   |             | <b>OR</b>            |                                  |
| 2  |   | <b>Name</b> | <b>Qualification</b> | <b>Result</b>                    |
| 3  |   | Mohan       | High school          | TRUE                             |
| 4  |   | Kishor      | Eight                | FALSE                            |
| 5  |   | Lalit       | High school          | TRUE                             |
| 6  |   | Anoop       | Inter                | TRUE                             |
| 7  |   | Rahul       | Eight                | FALSE                            |

| C3 |             |              |               | =NOT(B3>=2000) |
|----|-------------|--------------|---------------|----------------|
|    | A           | B            | C             |                |
| 1  |             | <b>NOT</b>   |               |                |
| 2  | <b>Name</b> | <b>Value</b> | <b>Result</b> |                |
| 3  | Suresh      | 600          | TRUE          |                |
| 4  | Mahesh      | 3000         | FALSE         |                |
| 5  | Rahul       | 700          | TRUE          |                |
| 6  | Arvind      | 4000         | FALSE         |                |

|    |             |               |              |                                               |
|----|-------------|---------------|--------------|-----------------------------------------------|
| D3 |             |               |              | =IF(C3>=85,"S",IF(C3>=75,"A",IF(C3>=65,"B"))) |
|    | A           | B             | C            | D                                             |
| 1  |             | <b>IF</b>     |              |                                               |
| 2  | <b>Name</b> | <b>Course</b> | <b>Marks</b> | <b>Grade</b>                                  |
| 3  | Suresh      | ADCA          | 83           | A                                             |
| 4  | Mahesh      | CCC           | 66           | B                                             |
| 5  | Rahul       | DCA           | 75           | A                                             |
| 6  | Arvind      | DICPA         | 89           | S                                             |

## Financial..

|    |             |              |  |  |                  |
|----|-------------|--------------|--|--|------------------|
| B5 | :           |              |  |  | =FV(B4/12,B3,B2) |
|    | A           | B            |  |  |                  |
| 1  |             | FV           |  |  |                  |
| 2  | Premium     | 8000         |  |  |                  |
| 3  | Month       | 18           |  |  |                  |
| 4  | Rate of Int | 8%           |  |  |                  |
| 5  | Result      | (152,457.52) |  |  |                  |

|    |                  |             |   |  |  |                   |
|----|------------------|-------------|---|--|--|-------------------|
| B5 |                  | :           |   |  |  | =PMT(B4/12,B3,B2) |
|    |                  | A           | B |  |  |                   |
| 1  |                  | PMT         |   |  |  |                   |
| 2  | Loan             | 200000      |   |  |  |                   |
| 3  | Period in Months | 18          |   |  |  |                   |
| 4  | Rate of Int      | 9%          |   |  |  |                   |
| 5  | Result           | (11,919.53) |   |  |  |                   |

|    |                  |                   |                      |
|----|------------------|-------------------|----------------------|
| B5 | :                |                   | =IPMT(B4/12,1,B3,B2) |
|    | A                | B                 |                      |
| 1  |                  | <b>IPMT</b>       |                      |
| 2  | Loan             | 200000            |                      |
| 3  | Period in Months | 18                |                      |
| 4  | Rate of Int      | 9%                |                      |
| 5  | <b>Result</b>    | <b>(1,500.00)</b> |                      |

|    |                  |                    |                      |
|----|------------------|--------------------|----------------------|
| B5 | :                |                    | =PPMT(B4/12,1,B3,B2) |
|    | A                | B                  |                      |
| 1  |                  | <b>PPMT</b>        |                      |
| 2  | Loan             | 200000             |                      |
| 3  | Period in Months | 18                 |                      |
| 4  | Rate of Int      | 9%                 |                      |
| 5  | <b>Result</b>    | <b>(10,419.53)</b> |                      |

## PROJECT WORK