



# ADVANCED **EXCEL**

53, Mayur Market, Thatipur, Gwalior  
Ph: 94257-01888,02888,03888



## **DISCLAIMER**

This book has been designed & developed by Viva Technologies for institute purpose only. It is not for sale in any means.



# Lookup Functions

## VLOOKUP

	A	B	C	D	E	F	G	H	I
1	<b>Employee Name</b>	<b>Years</b>	<b>Status</b>	<b>Salary</b>	<b>TaxRate</b>				
2	Prasad, Anand	16	Half Time	41,639				<b>TaxTable</b>	
3	Taneja, Shalu	15	Full Time	56,469				0	0
4	Patel, Puneet	2	Full Time	43,302				5,000	1%
5	Malik, Raghav	20	Full Time	28,122				15,000	3%
6	Chawla, Daya	12	Half Time	78,644				25,000	5%
7	Sachdeva, Hritesh	19	Full Time	75,511				35,000	6%
8	Sriniwas, Jagmohan	16	Full Time	42,909				45,000	7%
9	Malik, Rahul	20	Half Time	52,255				55,000	8%
10	Saini, Yachana	14	Full Time	54,972				65,000	10%
11	Gupta, Abhay	7	Half Time	42,401				75,000	11%
12	Anand, Abhaya	11	Full Time	25,901				85,000	12%
13	Sharma, Abhinay	15	Full Time	51,437				95,000	13%
14	Goyal, Abhir	13	Full Time	25,184					
15	Goel, Abish	10	Half Time	54,271					
16	Dubby, Adarsh	14	Full Time	45,360					
17	Kapoor, Ajay	13	Half Time	45,620					
18	Sareen, Akash	1	Full Time	17,205					
19	Bajaj, Akash	4	Half Time	71,830					

=VLOOKUP(D2,\$H\$3:\$I\$13,2)

## HLOOKUP

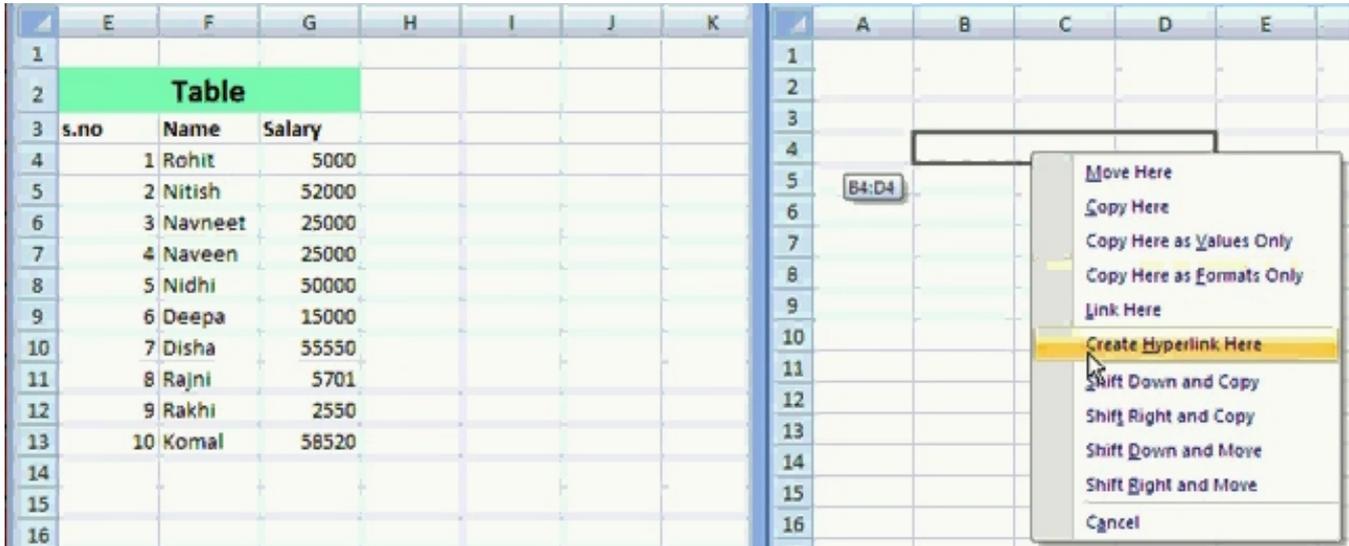
	A	B	C	D	E	F	G	H	I	J	K	L
1	<b>HLOOKUP IN MS EXCEL</b>											
2												
3	<b>Sales Report</b>											
4	<b>Year</b>	<b>Rupak</b>	<b>Kuntal</b>	<b>Rohan</b>	<b>Sima</b>	<b>Puja</b>	<b>Employee Name</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>		
5	2013	15200.00	13200.00	6500.00	14980.00	6630.00						
6	2014	13600.00	8960.00	13500.00	11300.00	12000.00						
7	2015	19200.00	7800.00	9800.00	19000.00	17200.00						
8	2016	25100.00	9850.00	9720.00	22100.00	16300.00						
9	2017	23100.00	11500.00	11250.00	32000.00	15200.00						
10	2018	26650.00	27500.00	17650.00	29900.00	23000.00						

=HLOOKUP(I5,B4:G10,5,0)

=HLOOKUP(I5,B4:G10,6,0)

=HLOOKUP(I5,B4:G10,7,0)

# Hyperlink Sheets



Click on border of first cell > Drag with Right Click > Hold Alt Key to switch sheet> Release right click and select create hyperlink here

# Large & Small Function

	A	B	C	D
1	<b>Salesman</b>	<b>Status</b>	<b>Job Rating</b>	<b>Salary</b>
2	John	Half Time	3	68,510
3	Alex	Full Time	3	76,530
4	Will	Full Time	4	37,020
5	Priyank	Full Time	5	64,590
6	Mark	Half Time	3	65,910
7	Kat	Full Time	2	74,710
8	Kelly	Full Time	5	17,205
9	Andrew	Half Time	3	71,830
10	David	Full Time	4	80,690

Use of Max & Min Function

=Large (array, 3)

=small (D2:D37, 4)

# Pivot Table

Name of person	Department	Sale 2016	Sale 2017
ram	Electronics	1200	1100
shyam	Garment	1100	1230
om	Electronics	1134	2200
raman	Electronics	1232	2100
deepak	Garment	1150	1400
raj	Garment	1200	1300
rihan	Electronics	2000	1500
amit	Furniture	1280	3200
anil	Furniture	800	1240
monu	Furniture	2300	1750

	A	B	C	D	E	F	G	H
1	<b>PIVOT TABLE</b>							
2	<b>Name</b>	<b>Gender</b>	<b>Age</b>	<b>Class</b>	<b>House</b>	<b>Unit Test 1</b>	<b>Unit Test 2</b>	<b>Final Test</b>
3	Abhimanyu	M	16	10	Bhoomi	84	79	81
4	Arjun	M	11	5	Vayu	82	83	91
5	Champa	F	15	8	Jal	81	78	88
6	Gopal	M	14	8	Bhoomi	70	75	79
7	Gopi	F	16	10	Agni	88	92	96
8	Hari	M	16	10	Bhoomi	82	81	80
9	Indu	F	14	8	Vayu	90	86	89
10	Keshav	M	15	9	Agni	87	89	96
11	Lalita	F	17	10	Vayu	70	90	92
12	Madhav	M	12	7	Jal	86	92	89
13	Sam	M	11	6	Agni	91	81	94
14	RNM	M	16	10	Agni	86	81	77
15	Student1	M	15	9	Agni	87	89	95
16	Student8	F	15	8	Vayu	81	90	95
17	Student2	F	17	10	Vayu	70	90	92
18	Student4	F	12	7	Jal	86	92	89
19	Student5	F	16	10	Jal	81	80	87
20	Sudevi	F	16	10	Jal	81	80	87

# Array Function

	A	B	C	D
1	<b>Part#</b>	<b>Units Sold</b>	<b>Unit Price</b>	<b>Total</b>
2	344D695	18	22.09	397.62
3	813T930	72	36.78	2648.16
4	342G756	22	75.19	1654.18
5	26D942	65	34.09	2215.85
6	364H780	34	75.19	2556.46
7	409S799	64	59.89	3832.96
8	609D942	95	75.19	7143.05
9	265T775	34	10.69	363.46
10	<b>Total</b>	<b>404</b>	<b>389.11</b>	<b>20811.74</b>

=sum (B2: B9 \* C2:C9)  
 =Ctrl + shift + Enter  
 ={= sum (B2 : B9 \* C2: C9)}

	A	B	C	D	E
1	<b>S.no.</b>	<b>Product</b>	<b>Quantity</b>	<b>Price</b>	<b>Total</b>
2	1	A	24	600	
3	2	B	12	200	
4	3	C	34	120	
5	4	D	67	354	
6	5	E	35	235	
7	6	F	8	80	
8	7	G	24	385	
9	8	H	9	600	
10	9	I	36	359	
11	10	J	5	346	
12	<b>Grand Total</b>				



	A	B	C	D	E	F
1	<b>Weekly Income Schedule</b>					
2	<b>Date</b>	<b>Expenditure</b>	<b>Refund</b>	<b>Total Exp</b>	<b>Income</b>	<b>Profit \$</b>
3	6-May	\$ 423.98	\$ 62.00	361.98	\$ 550.00	\$ 188.02
4	13-May	\$ 598.12	\$ 67.73	530.39	\$ 780.00	\$ 249.61
5	20-May	\$ 410.45	\$ 45.00	365.45	\$ 659.90	\$ 294.45
6	27-May	\$ 499.10	\$ 33.75	465.35	\$ 653.98	\$ 188.63
7	3-Jun	\$ 370.25	\$ 28.12	342.13	\$ 583.00	\$ 240.87
8	10-Jun	\$ 440.80	\$ 56.25	384.55	\$ 589.12	\$ 204.57
9	17-Jun	\$ 530.25	\$ 51.75	478.5	\$ 695.80	\$ 217.30
10	24-Jun	\$ 490.55	\$ 96.75	393.8	\$ 663.60	\$ 269.80
11						
12	<b>Total</b>	<b>\$ 3,763.50</b>	<b>\$ 441.35</b>	<b>\$ 3,322.15</b>	<b>\$ 5,175.40</b>	<b>\$1,853.25</b>

# Find Search & Mid function

	A	B	C	D	E	F	G
1	Item						
2	9C0K904						
3	3G6G702						
4	3C6F150						<b>Location</b>
5	5Y6919						agarwal modern bazar, 316
6	412W316						London school of IT education,363
7	3C5Y445						Keshav puram,C-14
8	2W7S145						Tri nagar,345
9	8K0Y194						Rohini,C-67
10	5J6RR2						Pitam pura,C-148
11	4W7C145						
12	5C6919						

= find ("c",A2)

= search("c",A2)

= mid(A2,2,4)

=mid(G5,find(",",G5)+2,2)



# Match Function

E3      fx      =MATCH(D3,A:A,0)

	A	B	C	D	E
1	<b>Part #</b>				
2	145-36-892				
3	458-89-988			937-899-588	17
4	542-85-455			467-05-478	
5	256-45-78			399-25-084	
6	236-56-12			857-59-617	
7	651-25-21			400-897-235	
8	770-05-669			145-85-254	
9	897-47-355			365-45-983	
10	400-50-555			365-435-366	
11	145-10-503			895-245-655	
12	857-47-355			651-25-21	
13	554-28-881			770-05-669	
14	156-35-235			897-47-355	
15	744-66-091			400-50-555	
16	459-58-611			145-10-503	
17	937-899-588			857-47-355	

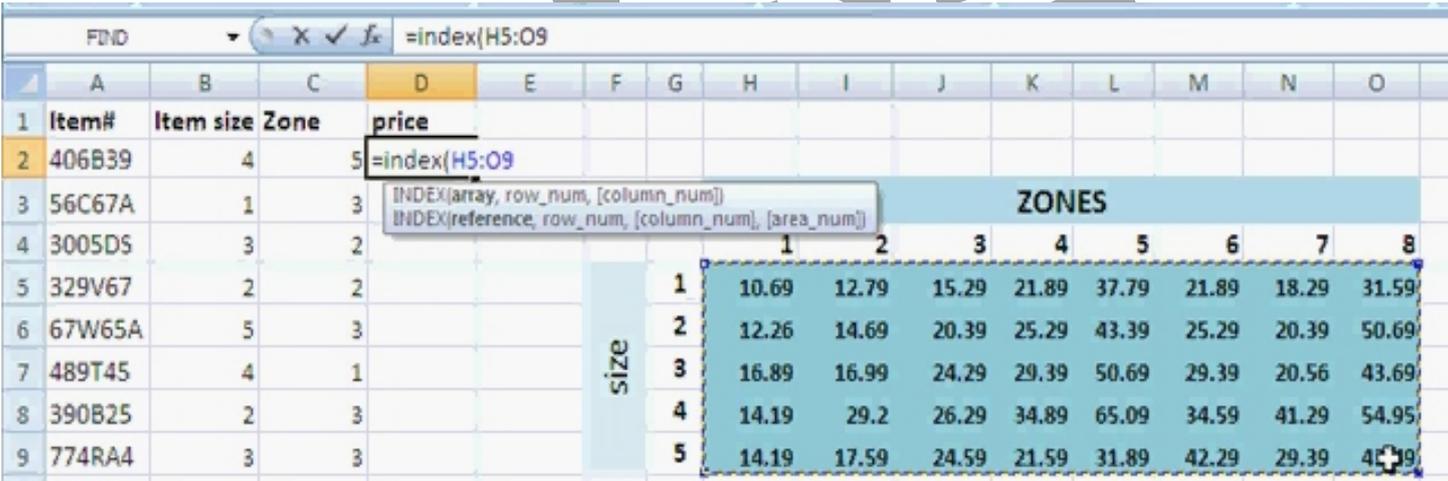
J	K	L	M	N	O	P
<b>Last</b>	<b>First</b>	<b>Sales</b>	<b>Match</b>		<b>Name</b>	<b>ID#</b>
Scott	John	11,000			Bond,Kat	121
Verma	Aryan	9,000			Sharma,Priyank	546
paul	Denny	17,000			Kumar,Sunil	845
Sharma	Priyank	5,000			Roy,Sunita	652
Kumar	Sunil	11,000			Singh,Sonia	897
Malhotra	Prince	9,000			Bud,Jackson	302
Hardy	Matt	12,000			Bajaj,Neha	754
Roy	Sunita	10,000			Hardy,Matt	965
Bajaj	Neha	4,500			Paul,Denny	895
Singh	Sonia	8,000			Malhotra,Prince	230
Christian	David	11,000			Verma,Aryan	770
Bud	Jackson	12,000			Aldis,Charles	307

J	K	L	M	N	O	P
<b>Last</b>	<b>First</b>	<b>Sales</b>	<b>Match</b>		<b>Name</b>	<b>ID#</b>
Scott	John	11,000	=match(J2&","&K2,O:O,0)			121
Verma	Aryan	9,000	MATCH(lookup_value, lookup_array, [match_type])			46
			exactly equal to lookup_value. Lookup_array can be in any order			
					Exact match	845
					1 - Less than	652
					-1 - Greater than	897

# Index function

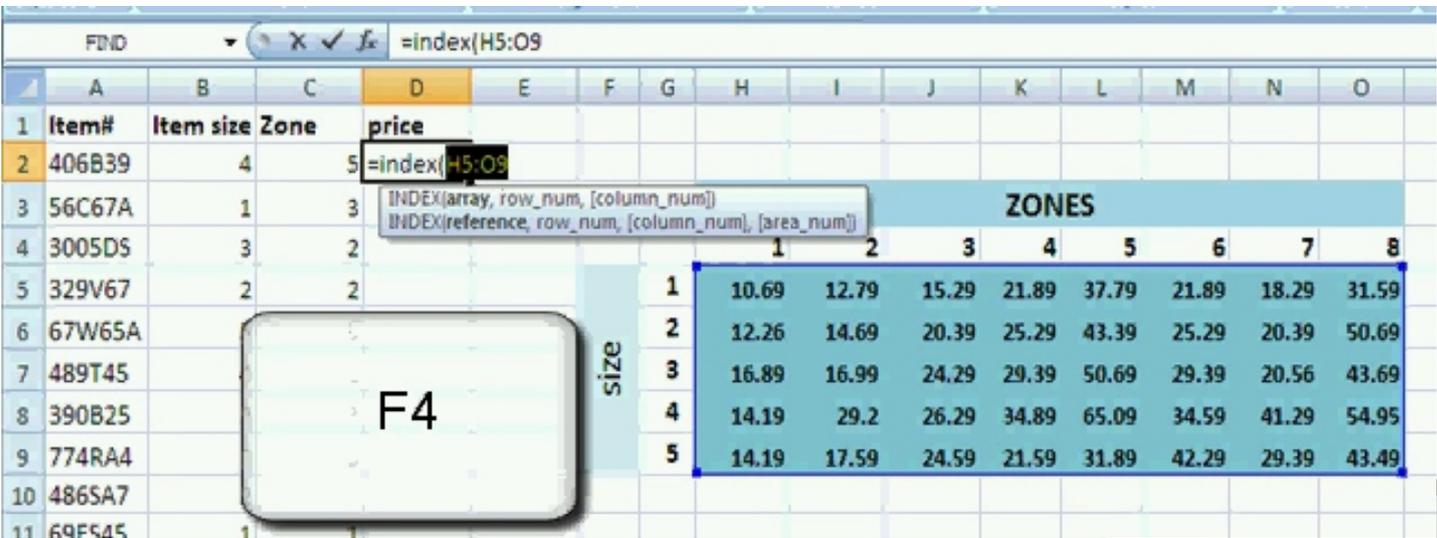
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Item#	Item size	Zone	price											
2	406B39	4	5	65.09											
3	56C67A	1	3					ZONES							
4	3005DS	3	2					1	2	3	4	5	6	7	8
5	329V67	2	2			size	1	10.69	12.79	15.29	21.89	37.79	21.89	18.29	31.59
6	67W65A	5	3		2		12.26	14.69	20.39	25.29	43.39	25.29	20.39	50.69	
7	489T45	4	1		3		16.89	16.99	24.29	29.39	50.69	29.39	20.56	43.69	
8	390B25	2	3		4		14.19	29.2	26.29	34.89	65.09	34.59	41.29	54.95	
9	774RA4	3	3		5		14.19	17.59	24.59	21.59	31.89	42.29	29.39	43.49	
10	486SA7	2	8												
11	69E545	1	1												
12	577PM2	5	8												
13	300D45	2	7												
14	448M49	3	4												
15	286N88	4	6												
16	124B35	5	3												

Formula bar: `=index(H5:O9`



`=Index(H5:O9,B2,C2)`

Formula bar: `=index(H5:O9`



# Index function

Formula bar: `=index($H$5:$O$9,B2,C2)`

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	Item#	Item size	Zone	price												
2	406B39	4	5	=index(\$H\$5:\$O\$9,B2,C2)												
3	56C67A	1	3					ZONES								
4	3005D5	3	2					1	2	3	4	5	6	7	8	
5	329V67	2	2					1	10.69	12.79	15.29	21.89	37.79	21.89	18.29	31.59
6	67W65A	5	3					2	12.26	14.69	20.39	25.29	43.39	25.29	20.39	50.69
7	489T45	4	1					3	16.89	16.99	24.29	29.39	50.69	29.39	20.56	43.69
8	390B25	2	3					4	14.19	29.2	26.29	34.89	65.09	34.59	41.29	54.95
9	774RA4	3	3					5	14.19	17.59	24.59	21.59	31.89	42.29	29.39	43.49

`=Index($H$5:$O$9,B2,C2)`

Formula bar: `10.69`

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	Item#	Item size	Zone	price												
2	406B39	4	5	65.09												
3	56C67A	1	3	15.29				ZONES								
4	3005D5	3	2	16.99				1	2	3	4	5	6	7	8	
5	329V67	2	2	14.69				1	10.69	12.79	15.29	21.89	37.79	21.89	18.29	31.59
6	67W65A	5	3	24.59				2	12.26	14.69	20.39	25.29	43.39	25.29	20.39	50.69
7	489T45	4	1	14.19				3	16.89	16.99	24.29	29.39	50.69	29.39	20.56	43.69
8	390B25	2	3	20.39				4	14.19	29.2	26.29	34.89	65.09	34.59	41.29	54.95
9	774RA4	3	3	24.29				5	14.19	17.59	24.59	21.59	31.89	42.29	29.39	43.49
10	486SA7	2	8	50.69												
11	69E545	1	1	10.69												

`=Index($H$5:$O$9,B2,C2)`

Formula bar: `=INDEX(Pricetable,B2,C2)`

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	Item#	Item size	Zone	price												
2	406B39	4	5	65.09												
3	56C67A	1	3	15.29				ZONES								
4	3005D5	3	2	16.99				1	2	3	4	5	6	7	8	
5	329V67	2	2	14.69				1	10.69	12.79	15.29	21.89	37.79	21.89	18.29	31.59
6	67W65A	5	3	24.59				2	12.26	14.69	20.39	25.29	43.39	25.29	20.39	50.69
7	489T45	4	1	14.19				3	16.89	16.99	24.29	29.39	50.69	29.39	20.56	43.69
8	390B25	2	3	20.39				4	14.19	29.2	26.29	34.89	65.09	34.59	41.29	54.95
9	774RA4	3	3	24.29				5	14.19	17.59	24.59	21.59	31.89	42.29	29.39	43.49

`=Index(Pricetable,B2,C2)`

# Text Function

	A	B	C	D	E	F
1	<b>Name</b>			<b>First Name</b>	<b>Last Name</b>	
2	PRASAD, ANAND			PRASAD	ANAND	
3	TANEJA, SHALU			TANEJA	SHALU	
4	PATEL, PUNEET			PATEL	PUNEET	
5	MALIK, RAGHAV			MALIK	RAGHAV	
6	CHAWLA, DAYA			CHAWLA	DAYA	
7	SACHDEVA, HRITESH			SACHDEVA	HRITESH	
8	SRINIWAS, JAGMOHAN			SRINIWAS	JAGMOHAN	
9	MALIK, RAHUL			MALIK	RAHUL	
10	SAINI, YACHANA			SAINI	YACHANA	
11	GUPTA, ABHAY			GUPTA	ABHAY	
12	ANAND, ABHAYA			ANAND	ABHAYA	
13	SHARMA, ABHINAY			SHARMA	ABHINAY	
14	GOYAL, ABHIR			GOYAL	ABHIR	
15	GOEL, ABISH			GOEL	ABISH	
16	DUBBY, ADARSH			DUBBY	ADARSH	
17	KAPOOR, AJAY			KAPOOR	AJAY	
18	SAREEN, AKASH			SAREEN	AKASH	
19	BAJAJ, AKASH			BAJAJ	AKASH	
20	KANSAL, AKSHAT			KANSAL	AKSHAT	
21	BANSAL, AKSHAY			BANSAL	AKSHAY	
22	TAYAL, AKSHU			TAYAL	AKSHU	
23				MITTAL	ALOK	

- =PROPER
- =UPPER
- =LOWER
- =PROPER(E2&" "&D2)
- =LEN(A2)

# Information Functions

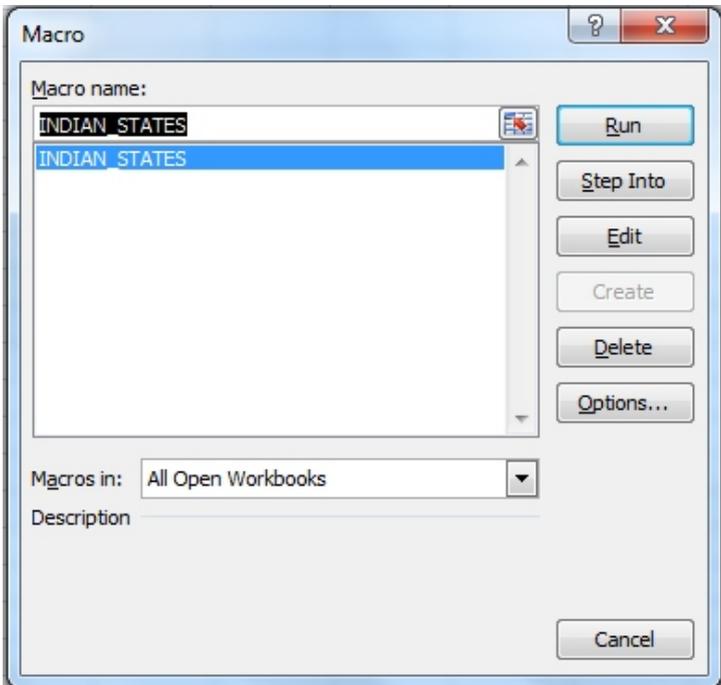
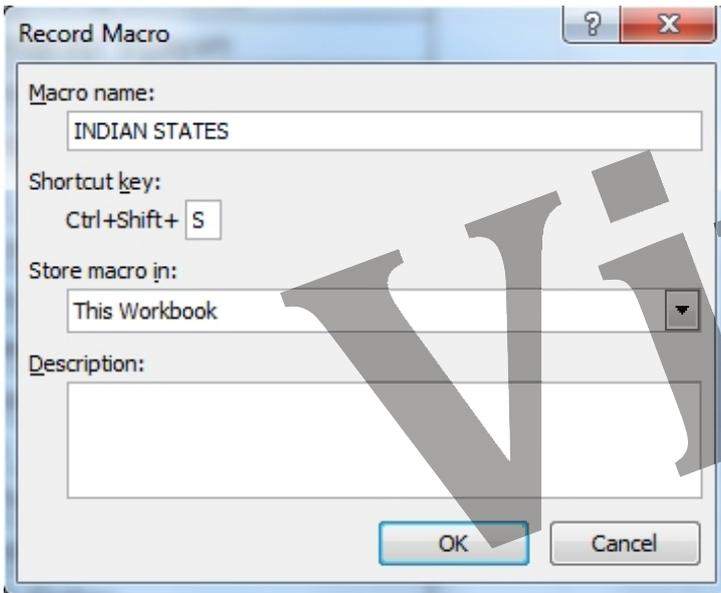
	A	B	C	D
1		ISTEXT	ISNUMBER	ISNONTEXT
2				
3	2516			
4	3610			
5	24/04/1987			
6	2156			
7	21564			

# Mod Function

	A	B
1	<b>Formula</b>	<b>Result</b>
2	=mod(3,2)	1
3	=mod(-3,2)	1
4	=mod(3,-2)	-1
5	=mod(-3,-2)	-1

# Macros

Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chhattisgarh
Delhi (NCT)
Goa
Gujarat
Haryana
Himachal Pradesh
Jharkhand
Karnataka
Kerala
Madhya Pradesh
Maharashtra
Manipur
Meghalaya
Mizoram
Nagaland
Odisha
Puducherry (UT)
Punjab
Rajasthan
Sikkim
Tamil Nadu
Telangana
Tripura
Uttar Pradesh
Uttarakhand
West Bengal



# Count, Countif & sumif Functions

	A	B	C	E	F
1	Salesman	Status	Job Rating		full time
2	John	Half Time	3		half time
3	Alex	Full Time	3		
4	Will	Full Time	4		
5	Priyank	Full Time	5		
6	Mark	Half Time	3		
7	Kat	Full Time	2		
8	Kelly	Full Time	5		
9	Andrew	Half Time	3		
10	David	Full Time	4		
11	Mathew	Half Time	3		
12	Jackson	Full Time	2		
13	Denny	Full Time	5		
14	Albert	Full Time	1		
15	Aldis	Half Time	5		
16	Bond	Full Time	1		
17	Bud	Half Time	1		
18	Burton	Full Time	3		
19	Cary	Half Time	3		
20	Carol	Full Time	1		

=Count(A2:A20)

=Countif(B:B,G1)

=Countif(B2:B20,"\*time")

=Sumif(B:B,G1,D:D)

## Rank Function

	A	B	C	D
1	Salesman	Area	Sales	Rank
2	John	Mumbai	19000	2
3	Alex	Mumbai	10000	
4	Will	Mumbai	15000	
5	Priyank	Mumbai	15500	
6	Mark	Mumbai	16500	
7	Kat	Mumbai	14000	
8	Kelly	Mumbai	14000	
9	Andrew	Mumbai	12000	
10	David	Mumbai	20000	
11	Mathew	Mumbai	8500	

=RANK(C2,C:C,0)

# If & nested if Function

	A	B	C	D	E
1	Salesman	Years	Status	Job Rating	Bonus
2	John	16	Half Time	3	
3	Alex	15	Full Time	3	
4	Will	2	Full Time	4	
5	Priyank	20	Full Time	5	
6	Mark	12	Half Time	3	
7	Kat	19	Full Time	2	
8	Kelly	16	Full Time	5	
9	Andrew	20	Half Time	3	
10	David	14	Full Time	4	
11	Mathew	7	Half Time	3	
12	Jackson	11	Full Time	2	
13	Denny	15	Full Time	5	
14	Albert	13	Full Time	1	

=IF(D1>3,1000,0)

=IF(D1>3,1000,IF(D2=3,500,IF(D2=2,100,0)))

# Replace & Substitute Function

	A	B	C	D	E
1		Replace 5th character			Replace 8th character
2	5979-QE-36			3384-HR-78	
3	5466-GH-56			6056-KN-23	
4	2546-DE-95			1236-DJ-59	
5	5432-RW-30			4589-NN-45	
6					
7		Substitute			
8	566-QE-36				
9	7410-WR-28				
10	25-ED-29				
11	5879-FG-91				
12					

=REPLACE(A2,5,1,"#")

=SUBSTITUTE(A8,"-","#")

=SUBSTITUTE(A8,"-","#",1)



# Transpose Function

C15      fx    (=TRANSPOSE(C5:H12))

	A	B	C	D	E	F	G	H	
1									
2									
3									
4									
5			+	Printers	Scanners	CD-Rom	Hard Disks	Total	
6			January	8,560	3,740	5,029	4,718	22,047	
7			February	6,500	2,739	4,993	2,615	16,847	
8			March	5,632	3,358	4,265	5,312	18,567	
9			April	4,563	4,866	4,765	1,108	15,302	
10			May	9,854	2,048	4,766	1,994	18,662	
11			June	5,013	2,842	5,379	3,830	17,064	
12			July	10,000	2,714	4,171	3,232	20,117	
13									
14		0	January	February	March	April	May	June	July
15	Printers	8560	6500	5,632	4,563	9,854	5,013	10,000	
16	Scanners	3740	2739	3358	4866	2048	2842	2714	
17	CD-Rom	5029	4993	4,265	4,765	4,766	5,379	4,171	
18	Hard Disks	4718	2615	5,312	1,108	1,994	3,830	3,232	
19	Total	22047	16847	18,567	15,302	18,662	17,064	20,117	
20									

# Weekday Function

B2      fx

	A	B	C	D	E	F
1	Date	Weekday			Sale Date	Shipping Date
2	21/06/2009				02/01/2010	
3	15/03/2010				03/02/2010	
4	11/05/2009				15/03/2010	
5	02/03/2010				02/06/2010	
6	20/01/2010				12/07/2010	
7	28/04/2010				17/07/2010	
8	01/01/2010				14/08/2010	
9	12/03/2010					
10	09/04/2010					
11	10/07/2009					

=DATE(2009,6,21)

=WEEKDAY(A2)

Right Click > Format cells > Number > Custom > dddd





# *Notes*



**VIVA INSTITUTE OF TECHNOLOGIES**

53, Mayur Market, Thatipur, Gwalior

Tel:- (0751) 4042064 | Mob :- 9425703888

E-mail :- [vivatechgw@gmail.com](mailto:vivatechgw@gmail.com)

**[www.vivatech.co.in](http://www.vivatech.co.in)**