	Α	В	С	D	Е	F	G	Н	I	J	K	L	
1	Income distribution of 1000 families follows Normal distribution with Mean 40000								000. From t	his group o	ne family is		
2	selected at	random, co	ompute the	probability									
3		i) below 4:	5000 ii) mo	re than 420	00 iii) between	45000 to 5	0000						
4	Also estim	ate the nun	nber of fami	lies whose	income lies								
5		i) atleast 4	6000 ii) atn	nost 50000	iii) between 35	000 to 500	00						
6													
7	Solution:-	Let, x=Inco	ome										
$\overline{}$	Here, we h												
9		Mean(μ)=	40000	S.D(σ)=	10000	N=	10000						
	First Part												
	i) Req.prol				0.69146246	110HtH.Dis1(+3000,C),E),1)							
	ii) Req.pro				0.42074029	1-NORM.DIST(42000,C9,E9,1)							
13	iii) Req.pre	ob = p(4500)	00 <x<50000< td=""><td>))</td><td>0.14988228</td><td colspan="8">NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)</td></x<50000<>))	0.14988228	NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)							
14													
	Second Pa												
16	i) Req.prol	0. = N*p(x)	=46000)		2743			46000,C9,E9,1))				
\vdash	ii) Req.pro				8413			000,C9,E9,1)					
-	iii) Req.pro	ob. = $N*p(3$	5000 <x<50< td=""><td>0000)</td><td>5328</td><td>G9*(NOR</td><td>M.DIST(50</td><td>000,C9,E9,1)-</td><td>NORM.DIS</td><td>ST(35000,C</td><td>(9,E9,1))</td><td></td></x<50<>	0000)	5328	G9*(NOR	M.DIST(50	000,C9,E9,1)-	NORM.DIS	ST(35000,C	(9,E9,1))		
19													
20													
21						Name	Karina Kc						
22						Roll NO:	16						

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	А	В	С	D	E	F	G	Н	I
1	fit Poisson	distribution	n to followi	ng data.					
2	No. of Acc	eidents:-	0	1	2	3	4	5	6
3	Noo. Of D	ays:-	195	91	40	20	10	3	1
4									
5	Table for e	expected fre	equencies						
6	X	f	f*x	Е					
7	0	195	0	160	Here, mean	n(μ)=	0.811	C14/B14	
8	1	91	91	130		N=	360		
9	2	40	80	53		E=	G\$9*POISSON(A8,G\$8,0)		\$\$8,0)
10	3	20	60	14					
11	4	10	40	3					
12	5	3	15	0					
13	6	1	6	0					
14		360	292	360					
15									
16						Name: Karina kc			
17	7					Roll No: 1	6		

	А	В	С	D	Е	F	G	Н	I
1	Fit binomia	al distritutio	on to given	data.					
2	No. of girls	:-	0	1	2	3	4		
3	No. of fam	ilies:-	20	112	244	115	21		
4									
5	Solution:-	Let x= Nun	nber of girls	5					
6	Here,we h	ave							
7		n=	4	p=	0.5	N=	512		
8	Calculation	table of ex	pected fre	quencies					
9		x=r	x=r	x=r	x=r				
10		0	20	0.0625	32	Where,O=			
11		1	112	0.25	128	E=Expecte	d frequency	У	
12		2	244	0.375	192				
13		3	115	0.25	128				
14		4	21	0.0625	32				
15			512	1	512				
16			P(x=r)=	BINOMDIS	T(B10,C\$7,I	E\$7,0)			
17			E=	G\$7*D11					
18									
19						Name= Ka	rina Kc		
20					Roll NO: 10	5			

	Α	В	С	D	Е	F	G	Н	I	J	K	L
1	Income dis	stribution of	f 1000 fami	lies follows	00 and S.D. 100	000. From t	his group o	ne family is				
2	selected at	random, co	mpute the j	probability								
3		i) below 45	5000 ii) mo	re than 420	00 iii) between	45000 to 5	50000					
4	Also estim	ate the num	ber of fami	lies whose	income lies							
5		i) atleast 4	6000 ii) atn	nost 50000	iii) between 35	000 to 500	00					
6												
7	Solution:-	Let, x=Inco	me									
8	Here, we h	ave										
9		Mean(μ)=	40000	$S.D(\sigma)=$	10000	N=	10000					
10	First Part											
11	i) Req.prol	b. = $p(x<450)$	000)		0.69146246	NORM.DIST(45000,C9,E9,1)						
12	ii) Req.pro	b = p(x > 42)	(000)		0.42074029	1-NORM.DIST(42000,C9,E9,1)						
13	iii) Req.pr	ob = p(4500)	0 <x<50000< td=""><td>))</td><td>0.14988228</td><td colspan="6">NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)</td><td></td></x<50000<>))	0.14988228	NORM.DIST(50000,C9,E9,1)-NORM.DIST(45000,C9,E9,1)						
14												
15	Second Pa	rt										
16	i) Req.prol	b. = N*p(x>	=46000)		2743	G9*(1-NC	RM.DIST(46000,C9,E9,1))			
17	ii) Req.pro	b. = N*p(x<	<=50000)		8413	G9*NORN	M.DIST(500	000,C9,E9,1)				
18	iii) Req.pr	ob. = $N*p(3$	5000 <x<50< td=""><td>0000)</td><td>5328</td><td>G9*(NOR</td><td>M.DIST(50</td><td>000,C9,E9,1)-</td><td>NORM.DIS</td><td>ST(35000,0</td><td>C9,E9,1))</td><td></td></x<50<>	0000)	5328	G9*(NOR	M.DIST(50	000,C9,E9,1)-	NORM.DIS	ST(35000,0	C9,E9,1))	
19												
20												
21						Name	Koyal Kc					
22						Roll NO:	16					

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	А	В	С	D	Е	F	G	Н	I
1	fit Poisson	distribution	n to followi	ng data.					
2	No. of Acc	eidents:-	0	1	2	3	4	5	6
3	Noo. Of D	ays:-	195	91	40	20	10	3	1
4									
5	Table for e	expected fre							
6	X	f	f*x	Е					
7	0	195	0	160	Here, mean	n(μ)=	0.811	C14/B14	
8	1	91	91	130		N=	360		
9	2	40	80	53		E=	G\$9*POIS	SON(A8,G	\$8,0)
10	3	20	60	14					
11	4	10	40	3					
12	5	3	15	0					
13	6	1	6	0					
14		360	292	360					
15									
16						Name: Koyal kc			
17						Roll No: 1	6		

	А	В	С	D	Е	F	G	Н	I
1	Fit binomia	al distritutio	on to given	data.					
2	No. of girls	:-	0	1	2	3	4		
3	No. of fam	ilies:-	20	112	244	115	21		
4									
5	Solution:-	Let x= Nun	nber of girls	5					
6	Here,we h	ave							
7		n=	4	p=	0.5	N=	512		
8	Calculation	table of ex	pected fre	quencies					
9		x=r	x=r	x=r	x=r				
10		0	20	0.0625	32	Where,O=			
11		1	112	0.25	128	E=Expecte	d frequency	У	
12		2	244	0.375	192				
13		3	115	0.25	128				
14		4	21	0.0625	32				
15			512	1	512				
16			P(x=r)=	BINOMDIS	T(B10,C\$7,I	E\$7,0)			
17			E=	G\$7*D11					
18									
19						Name= Ko	yal Kc		
20					Roll NO: 10	5			