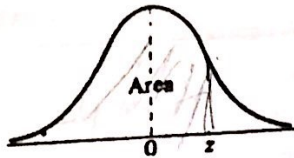


جدول ۱: توزیع دوجمله‌ای

		p									
n	r	0.10	0.20	0.25	0.30	0.40	0.50	0.60	0.70	0.80	0.90
5	0	0.5905	0.3277	0.2373	0.1681	0.0778	0.0312	0.0102	0.0024	0.0003	0.0000
	1	0.9185	0.7373	0.6328	0.5282	0.3370	0.1875	0.0870	0.0308	0.0067	0.0005
	2	0.9914	0.9421	0.8965	0.8369	0.6826	0.5000	0.3174	0.1631	0.0579	0.0086
	3	0.9995	0.9933	0.9844	0.9692	0.9130	0.8125	0.6630	0.4718	0.2627	0.0815
	4	1.0000	0.9997	0.9990	0.9976	0.9898	0.9688	0.9222	0.8319	0.6723	0.4095
10	5	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	0	0.3487	0.1074	0.0563	0.0282	0.0060	0.0010	0.0001	0.0000	0.0000	0.0000
	1	0.7361	0.3758	0.2440	0.1493	0.0464	0.0107	0.0017	0.0001	0.0000	0.0000
	2	0.9298	0.6778	0.5256	0.3828	0.1673	0.0547	0.0123	0.0016	0.0001	0.0000
	3	0.9872	0.8791	0.7759	0.6496	0.3823	0.1719	0.0548	0.0106	0.0009	0.0000
	4	0.9984	0.9672	0.9219	0.8497	0.6331	0.3770	0.1662	0.0474	0.0064	0.0002
	5	0.9999	0.9936	0.9803	0.9527	0.8338	0.6230	0.3669	0.1503	0.0328	0.0016
	6	1.0000	0.9991	0.9965	0.9894	0.9452	0.8281	0.6177	0.3504	0.1209	0.0128
	7	1.0000	0.9999	0.9996	0.9984	0.9877	0.9453	0.8327	0.6172	0.3222	0.0702
	8	1.0000	1.0000	1.0000	0.9999	0.9983	0.9893	0.9536	0.8507	0.6242	0.2639
15	9	1.0000	1.0000	1.0000	1.0000	0.9999	0.9990	0.9940	0.9718	0.8926	0.6513
	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
	0	0.2059	0.0352	0.0134	0.0047	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000
	1	0.5490	0.1671	0.0802	0.0353	0.0052	0.0005	0.0000	0.0000	0.0000	0.0000
	2	0.8159	0.3980	0.2361	0.1268	0.0271	0.0037	0.0003	0.0000	0.0000	0.0000
	3	0.9444	0.6482	0.4613	0.2969	0.0905	0.0176	0.0019	0.0001	0.0000	0.0000
	4	0.9873	0.8358	0.6865	0.5155	0.2173	0.0592	0.0094	0.0007	0.0000	0.0000
	5	0.9978	0.9389	0.8516	0.7216	0.4032	0.1509	0.0338	0.0037	0.0001	0.0000
	6	0.9997	0.9819	0.9434	0.8689	0.6098	0.3036	0.0951	0.0152	0.0008	0.0000
	7	1.0000	0.9958	0.9827	0.9500	0.7869	0.5000	0.2131	0.0500	0.0042	0.0000
	8	1.0000	0.9992	0.9958	0.9848	0.9050	0.6964	0.3902	0.1311	0.0181	0.0003
	9	1.0000	0.9999	0.9992	0.9963	0.9662	0.8491	0.5968	0.2784	0.0611	0.0023
	10	1.0000	1.0000	0.9999	0.9993	0.9907	0.9408	0.7827	0.4845	0.1642	0.0127
	11	1.0000	1.0000	1.0000	0.9999	0.9981	0.9824	0.9095	0.7031	0.3518	0.0556
	12	1.0000	1.0000	1.0000	1.0000	0.9997	0.9963	0.9729	0.8732	0.6020	0.1841
13	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9948	0.9647	0.8329	0.4510	
14	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9953	0.9648	0.7941	
15	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	
20	0	0.1216	0.0115	0.0032	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1	0.3917	0.0692	0.0243	0.0076	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000
	2	0.6769	0.2061	0.0913	0.0355	0.0036	0.0002	0.0000	0.0000	0.0000	0.0000
	3	0.8670	0.4114	0.2252	0.1071	0.0160	0.0013	0.0001	0.0000	0.0000	0.0000
	4	0.9568	0.6296	0.4148	0.2375	0.0510	0.0059	0.0003	0.0000	0.0000	0.0000
	5	0.9887	0.8042	0.6172	0.4164	0.1256	0.0207	0.0016	0.0000	0.0000	0.0000
	6	0.9976	0.9133	0.7858	0.6080	0.2500	0.0577	0.0065	0.0003	0.0000	0.0000
	7	0.9996	0.9679	0.8982	0.7723	0.4159	0.1316	0.0210	0.0013	0.0000	0.0000
	8	0.9999	0.9900	0.9591	0.8867	0.5956	0.2517	0.0565	0.0051	0.0001	0.0000
	9	1.0000	0.9974	0.9861	0.9520	0.7553	0.4119	0.1275	0.0171	0.0006	0.0000
	10	1.0000	0.9994	0.9961	0.9829	0.8725	0.5881	0.2447	0.0480	0.0026	0.0000
	11	1.0000	0.9999	0.9991	0.9949	0.9435	0.7483	0.4044	0.1133	0.0100	0.0001
	12	1.0000	1.0000	0.9998	0.9987	0.9790	0.8684	0.5841	0.2277	0.0321	0.0004
	13	1.0000	1.0000	1.0000	0.9997	0.9935	0.9423	0.7500	0.3920	0.0867	0.0024
	14	1.0000	1.0000	1.0000	1.0000	0.9984	0.9793	0.8744	0.5836	0.1958	0.0113
	15	1.0000	1.0000	1.0000	1.0000	0.9997	0.9941	0.9490	0.7625	0.3704	0.0432
	16	1.0000	1.0000	1.0000	1.0000	1.0000	0.9987	0.9840	0.8929	0.5886	0.1330
	17	1.0000	1.0000	1.0000	1.0000	1.0000	0.9998	0.9964	0.9645	0.7939	0.3231
	18	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9995	0.9924	0.9308	0.6083
	19	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9992	0.9885	0.8784
20	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	



z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-3.4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002
-3.3	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003
-3.2	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0007	0.0007
-3.1	0.0010	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0010	0.0010
-3.0	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011	0.0011	0.0011	0.0014	0.0014
-2.9	0.0019	0.0018	0.0017	0.0017	0.0016	0.0016	0.0015	0.0015	0.0020	0.0019
-2.8	0.0026	0.0025	0.0024	0.0023	0.0023	0.0022	0.0021	0.0021	0.0027	0.0026
-2.7	0.0035	0.0034	0.0033	0.0032	0.0031	0.0030	0.0029	0.0028	0.0037	0.0036
-2.6	0.0047	0.0045	0.0044	0.0043	0.0041	0.0040	0.0039	0.0038	0.0049	0.0048
-2.5	0.0062	0.0060	0.0059	0.0057	0.0055	0.0054	0.0052	0.0051	0.0064	0.0064
-2.4	0.0082	0.0080	0.0078	0.0075	0.0073	0.0071	0.0069	0.0068	0.0087	0.0084
-2.3	0.0107	0.0104	0.0102	0.0099	0.0096	0.0094	0.0091	0.0089	0.0113	0.0110
-2.2	0.0139	0.0136	0.0132	0.0129	0.0125	0.0122	0.0119	0.0116	0.0146	0.0143
-2.1	0.0179	0.0174	0.0170	0.0166	0.0162	0.0158	0.0154	0.0150	0.0188	0.0183
-2.0	0.0228	0.0222	0.0217	0.0212	0.0207	0.0202	0.0197	0.0192	0.0239	0.0233
-1.9	0.0287	0.0281	0.0274	0.0268	0.0262	0.0256	0.0250	0.0244	0.0301	0.0294
-1.8	0.0359	0.0352	0.0344	0.0336	0.0329	0.0322	0.0314	0.0307	0.0375	0.0367
-1.7	0.0446	0.0436	0.0427	0.0418	0.0409	0.0401	0.0392	0.0384	0.0465	0.0455
-1.6	0.0548	0.0537	0.0526	0.0516	0.0505	0.0495	0.0485	0.0475	0.0571	0.0559
-1.5	0.0668	0.0655	0.0643	0.0630	0.0618	0.0606	0.0594	0.0582	0.0694	0.0681
-1.4	0.0808	0.0793	0.0778	0.0764	0.0749	0.0735	0.0722	0.0708	0.0838	0.0823
-1.3	0.0968	0.0951	0.0934	0.0918	0.0901	0.0885	0.0869	0.0853	0.1003	0.0985
-1.2	0.1151	0.1131	0.1112	0.1093	0.1075	0.1056	0.1038	0.1020	0.1190	0.1170
-1.1	0.1357	0.1335	0.1314	0.1292	0.1271	0.1251	0.1230	0.1210	0.1401	0.1379
-1.0	0.1587	0.1562	0.1539	0.1515	0.1492	0.1469	0.1446	0.1423	0.1635	0.1611
-0.9	0.1841	0.1814	0.1788	0.1762	0.1736	0.1711	0.1685	0.1660	0.1894	0.1867
-0.8	0.2119	0.2090	0.2061	0.2033	0.2005	0.1977	0.1949	0.1922	0.2177	0.2148
-0.7	0.2420	0.2389	0.2358	0.2327	0.2296	0.2266	0.2236	0.2206	0.2483	0.2451
-0.6	0.2743	0.2709	0.2676	0.2643	0.2611	0.2578	0.2546	0.2514	0.2810	0.2776
-0.5	0.3085	0.3050	0.3015	0.2981	0.2946	0.2912	0.2877	0.2843	0.3156	0.3121
-0.4	0.3446	0.3409	0.3372	0.3336	0.3300	0.3264	0.3228	0.3192	0.3520	0.3483
-0.3	0.3821	0.3783	0.3745	0.3707	0.3669	0.3632	0.3594	0.3557	0.3897	0.3859
-0.2	0.4207	0.4168	0.4129	0.4090	0.4052	0.4013	0.3974	0.3936	0.4286	0.4247
-0.1	0.4602	0.4562	0.4522	0.4483	0.4443	0.4404	0.4364	0.4325	0.4681	0.4641
-0.0	0.5000	0.4960	0.4920	0.4880	0.4840	0.4801	0.4761	0.4721	0.5319	0.5359
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5714	0.5753
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.6103	0.6141
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6480	0.6517
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6844	0.6879
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.7224	0.7259
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7517	0.7549
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7823	0.7852
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.8106	0.8133
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8365	0.8389
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8621	0.8630
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8810	0.8830
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8997	0.9015
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.9162	0.9177
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9306	0.9319
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9278	0.9292	0.9441	0.9455
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9535	0.9545
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9625	0.9633
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9699	0.9706
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9761	0.9767
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9812	0.9817
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9854	0.9857
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9887	0.9890
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9916	0.9916
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9934	0.9936
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9951	0.9952
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9963	0.9964
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9973	0.9974
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9980	0.9981
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9986	0.9986
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9990	0.9990
3.0	0.9987	0.9987	0.9987	0.9988	0.9988	0.9989	0.9989	0.9989	0.9993	0.9993
3.1	0.9990	0.9991	0.9991	0.9991	0.9992	0.9992	0.9992	0.9992	0.9995	0.9995
3.2	0.9993	0.9993	0.9994	0.9994	0.9994	0.9994	0.9994	0.9995	0.9996	0.9997
3.3	0.9995	0.9995	0.9995	0.9996	0.9996	0.9996	0.9996	0.9996	0.9997	0.9998
3.4	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997	0.9997		

جدول ۳: توزیع آماره من-ویتنی

k_1	a	$k_2 = 3$	$k_2 = 4$	$k_2 = 5$	$k_2 = 6$	$k_2 = 7$	$k_2 = 8$	$k_2 = 9$	$k_2 = 10$	$k_2 = 11$	$k_2 = 12$
3	0	.0500	.0286	.0179	.0119	.0083	.0061	.0045	.0035	.0027	.0022
	1	.1000	.0571	.0357	.0238	.0167	.0121	.0091	.0070	.0055	.0044
	2	.2000	.1143	.0714	.0476	.0333	.0242	.0182	.0140	.0110	.0088
	3	.3500	.2000	.1250	.0833	.0583	.0424	.0318	.0245	.0192	.0154
	4	.5000	.3143	.1964	.1310	.0917	.0667	.0500	.0385	.0302	.0242
	5	.6500	.4286	.2857	.1905	.1333	.0970	.0727	.0559	.0440	.0352
	6	.8000	.5714	.3929	.2738	.1917	.1394	.1045	.0804	.0632	.0505
	7	.9000	.6857	.5000	.3571	.2583	.1879	.1409	.1084	.0852	.0681
	8	.9500	.8000	.6071	.4524	.3333	.2485	.1864	.1434	.1126	.0901
	9	1.0000	.8857	.7143	.5476	.4167	.3152	.2409	.1853	.1456	.1165
	10		.9429	.8036	.6429	.5000	.3879	.3000	.2343	.1841	.1473
	11		.9714	.8750	.7262	.5833	.4606	.3636	.2867	.2280	.1824
	12		1.0000	.9286	.8095	.6667	.5394	.4318	.3462	.2775	.2242
	13			.9643	.8690	.7417	.6121	.5000	.4056	.3297	.2681
	14			.9821	.9167	.8083	.6848	.5682	.4685	.3846	.3165
	15			1.0000	.9524	.8667	.7515	.6364	.5315	.4423	.3670
	16				.9762	.9083	.8121	.7000	.5944	.5000	.4198
	17				.9881	.9417	.8606	.7591	.6538	.5577	.4725
	18				1.0000	.9667	.9030	.8136	.7133	.6154	.5275
4	0		.0143	.0079	.0048	.0030	.0020	.0014	.0010	.0007	.0005
	1		.0286	.0159	.0095	.0061	.0040	.0028	.0020	.0015	.0011
	2		.0571	.0317	.0190	.0121	.0081	.0056	.0040	.0029	.0022
	3		.1000	.0556	.0333	.0212	.0141	.0098	.0070	.0051	.0038
	4		.1714	.0952	.0571	.0364	.0242	.0168	.0120	.0088	.0066
	5		.2429	.1429	.0857	.0545	.0364	.0252	.0180	.0132	.0099
	6		.3429	.2063	.1286	.0818	.0545	.0378	.0270	.0198	.0148
	7		.4429	.2778	.1762	.1152	.0768	.0531	.0380	.0278	.0209
	8		.5571	.3651	.2381	.1576	.1071	.0741	.0529	.0388	.0291
	9		.6571	.4524	.3048	.2061	.1414	.0993	.0709	.0520	.0390
	10		.7571	.5476	.3810	.2636	.1838	.1301	.0939	.0689	.0516
	11		.8286	.6349	.4571	.3242	.2303	.1650	.1199	.0886	.0665
	12		.9000	.7222	.5429	.3939	.2848	.2070	.1518	.1128	.0852
	13		.9429	.7937	.6190	.4636	.3414	.2517	.1868	.1399	.1060
	14		.9714	.8571	.6952	.5364	.4040	.3021	.2268	.1714	.1308
	15		.9857	.9048	.7619	.6061	.4667	.3552	.2697	.2059	.1582
	16		1.0000	.9444	.8238	.6758	.5333	.4126	.3177	.2447	.1896
	17			.9683	.8714	.7364	.5960	.4699	.3666	.2857	.2231
	18			.9841	.9143	.7939	.6586	.5301	.4196	.3304	.2604
	19			.9921	.9429	.8424	.7152	.5874	.4725	.3766	.2995
	20			1.0000	.9667	.8848	.7697	.6448	.5275	.4256	.3418
	21				.9810	.9182	.8162	.6979	.5804	.4747	.3852
	22				.9905	.9455	.8586	.7483	.6334	.5253	.4308
	23				.9952	.9636	.8929	.7930	.6823	.5744	.4764
	24				1.0000	.9788	.9232	.8350	.7303	.6234	.5236

k_1	a	$k_2 = 5$	$k_2 = 6$	$k_2 = 7$	$k_2 = 8$	$k_2 = 9$	$k_2 = 10$	k_1	a	$k_2 = 7$	$k_2 = 8$	$k_2 = 9$	$k_2 = 10$
5	0	.0040	.0022	.0013	.0008	.0005	.0003	7	0	.0003	.0002	.0001	.0001
	1	.0079	.0043	.0025	.0016	.0010	.0007		1	.0006	.0003	.0002	.0001
	2	.0159	.0087	.0051	.0031	.0020	.0013		2	.0012	.0006	.0003	.0002
	3	.0278	.0152	.0088	.0054	.0035	.0023		3	.0020	.0011	.0006	.0004
	4	.0476	.0260	.0152	.0093	.0060	.0040		4	.0035	.0019	.0010	.0006
	5	.0754	.0411	.0240	.0148	.0095	.0063		5	.0055	.0030	.0017	.0010
	6	.1111	.0628	.0366	.0225	.0145	.0097		6	.0087	.0047	.0026	.0015
	7	.1548	.0887	.0530	.0326	.0210	.0140		7	.0131	.0070	.0039	.0023
	8	.2103	.1234	.0745	.0466	.0300	.0200		8	.0189	.0103	.0058	.0034
	9	.2738	.1645	.1010	.0637	.0415	.0276		9	.0265	.0145	.0082	.0048
	10	.3452	.2143	.1338	.0855	.0559	.0376		10	.0364	.0200	.0115	.0068
	11	.4206	.2684	.1717	.1111	.0734	.0496		11	.0487	.0270	.0156	.0093
	12	.5000	.3312	.2159	.1422	.0949	.0646		12	.0641	.0361	.0209	.0125
	13	.5794	.3961	.2652	.1772	.1199	.0823		13	.0825	.0469	.0274	.0165
	14	.6548	.4654	.3194	.2176	.1489	.1032		14	.1043	.0603	.0356	.0215
	15	.7262	.5346	.3775	.2618	.1818	.1272		15	.1297	.0760	.0454	.0277
	16	.7897	.6039	.4381	.3108	.2138	.1548		16	.1588	.0946	.0571	.0351
	17	.8452	.6688	.5000	.3621	.2592	.1855		17	.1914	.1159	.0708	.0439
	18	.8889	.7316	.5619	.4165	.3032	.2198		18	.2279	.1405	.0869	.0544
	19	.9246	.7857	.6225	.4716	.3497	.2567		19	.2675	.1678	.1052	.0665
	20	.9524	.8355	.6806	.5284	.3986	.2970		20	.3100	.1984	.1261	.0806
	21	.9722	.8766	.7348	.5835	.4491	.3393		21	.3552	.2317	.1496	.0966
	22	.9841	.9113	.7841	.6379	.5000	.3839		22	.4024	.2679	.1755	.1148
	23	.9921	.9372	.8283	.6892	.5509	.4296		23	.4508	.3063	.2039	.1349
	24	.9960	.9589	.8662	.7382	.6014	.4765		24	.5000	.3472	.2349	.1574
	25	1.0000	.9740	.8990	.7824	.6503	.5235		25	.5492	.3894	.2680	.1819
6	0		.0011	.0006	.0003	.0002	.0001	26	.5976	.4333	.3032	.2087	
	1		.0022	.0012	.0007	.0004	.0002	27	.6448	.4775	.3403	.2374	
	2		.0043	.0023	.0013	.0008	.0005	28	.6900	.5225	.3788	.2681	
	3		.0076	.0041	.0023	.0014	.0009	29	.7325	.5667	.4185	.3004	
	4		.0130	.0070	.0040	.0024	.0015	30	.7721	.6106	.4591	.3345	
	5		.0206	.0111	.0063	.0038	.0024	31	.8086	.6528	.5000	.3698	
	6		.0325	.0175	.0100	.0060	.0037	32	.8412	.6937	.5409	.4063	
	7		.0465	.0256	.0147	.0088	.0055	33	.8703	.7321	.5815	.4434	
	8		.0660	.0367	.0213	.0128	.0080	34	.8957	.7683	.6212	.4811	
	9		.0898	.0507	.0296	.0180	.0112	35	.9175	.8016	.6597	.5189	
	10		.1201	.0688	.0406	.0248	.0156						
	11		.1548	.0903	.0539	.0332	.0210						
	12		.1970	.1171	.0709	.0440	.0280						
	13		.2424	.1474	.0906	.0567	.0363						
	14		.2944	.1830	.1142	.0723	.0467						
	15		.3496	.2226	.1412	.0905	.0589						
	16		.4091	.2669	.1725	.1119	.0736						
	17		.4686	.3141	.2068	.1361	.0903						
	18		.5314	.3654	.2454	.1638	.1099						
	19		.5909	.4178	.2864	.1942	.1317						
	20		.6504	.4726	.3310	.2280	.1566						
	21		.7056	.5274	.3773	.2643	.1838						
	22		.7576	.5822	.4259	.3055	.2139						
	23		.8030	.6346	.4749	.3445	.2461						
	24		.8452	.6859	.5251	.3878	.2811						
	25		.8799	.7331	.5741	.4320	.3177						
	26		.9102	.7774	.6227	.4773	.3564						
	27		.9340	.8170	.6690	.5227	.3962						
	28		.9535	.8526	.7136	.5680	.4374						
	29		.9675	.8829	.7546	.6122	.4789						
	30		.9794	.9097	.7932	.6555	.5211						

k_1	a	$k_2 = 8$	$k_2 = 9$	$k_2 = 10$	k_1	a	$k_2 = 9$	$k_2 = 10$	k_1	a	$k_2 = 10$
8	0	.0001	.0000	.0000	9	0	.0000	.0000	10	0	.0000
	1	.0002	.0001	.0000		1	.0000	.0000		1	.0000
	2	.0003	.0002	.0001		2	.0001	.0000		2	.0000
	3	.0005	.0003	.0002		3	.0001	.0001		3	.0000
	4	.0009	.0005	.0003		4	.0002	.0001		4	.0001
	5	.0015	.0008	.0004		5	.0004	.0002		5	.0001
	6	.0023	.0012	.0007		6	.0006	.0003		6	.0002
	7	.0035	.0019	.0010		7	.0009	.0005		7	.0002
	8	.0052	.0028	.0015		8	.0014	.0007		8	.0004
	9	.0074	.0039	.0022		9	.0020	.0011		9	.0005
	10	.0103	.0056	.0031		10	.0028	.0015		10	.0008
	11	.0141	.0076	.0043		11	.0039	.0021		11	.0010
	12	.0190	.0103	.0058		12	.0053	.0028		12	.0014
	13	.0249	.0137	.0078		13	.0071	.0038		13	.0019
	14	.0325	.0180	.0103		14	.0094	.0051		14	.0026
	15	.0415	.0232	.0133		15	.0122	.0066		15	.0034
	16	.0524	.0296	.0171		16	.0157	.0086		16	.0045
	17	.0652	.0372	.0217		17	.0200	.0110		17	.0057
	18	.0803	.0464	.0273		18	.0252	.0140		18	.0073
	19	.0974	.0570	.0338		19	.0313	.0175		19	.0093
	20	.1172	.0694	.0416		20	.0385	.0217		20	.0116
	21	.1393	.0836	.0506		21	.0470	.0267		21	.0144
	22	.1641	.0998	.0610		22	.0567	.0326		22	.0177
	23	.1911	.1179	.0729		23	.0680	.0394		23	.0216
	24	.2209	.1383	.0864		24	.0807	.0474		24	.0262
	25	.2527	.1606	.1015		25	.0951	.0564		25	.0315
	26	.2869	.1852	.1185		26	.1112	.0667		26	.0376
	27	.3227	.2117	.1371		27	.1290	.0782		27	.0446
	28	.3605	.2404	.1577		28	.1487	.0912		28	.0526
	29	.3992	.2707	.1800		29	.1701	.1055		29	.0615
	30	.4392	.3029	.2041		30	.1933	.1214		30	.0716
	31	.4796	.3365	.2299		31	.2181	.1388		31	.0827
	32	.5204	.3715	.2574		32	.2447	.1577		32	.0952
	33	.5608	.4074	.2863		33	.2729	.1781		33	.1088
	34	.6008	.4442	.3167		34	.3024	.2001		34	.1237
	35	.6395	.4813	.3482		35	.3332	.2235		35	.1399
	36	.6773	.5187	.3809		36	.3652	.2483		36	.1575
	37	.7131	.5558	.4143		37	.3981	.2745		37	.1763
	38	.7473	.5926	.4484		38	.4317	.3019		38	.1965
	39	.7791	.6285	.4827		39	.4657	.3304		39	.2179
	40	.8089	.6635	.5173		40	.5000	.3598		40	.2406
				41	.5343	.3901	41	.2644			
				42	.5683	.4211	42	.2894			
				43	.6019	.4524	43	.3153			
				44	.6348	.4841	44	.3421			
				45	.6668	.5159	45	.3697			
							46	.3980			
							47	.4267			
							48	.4559			
							49	.4853			
							50	.5147			

$$P(T^+ \geq C) = P\left(T^+ \leq \frac{n(n+1)}{2} - C\right)$$

جدول ۴. توزیع آماره رتبه‌ای نشانه‌ای

$$P(T^+ \geq 49) = P(T^+ \leq \frac{11 \times 12}{2} - 49) = P(T^+ \leq 28)$$

N	1	2	3	4	5	6	7
0	.5000	.2500	.1250	.0625	.0313	.0156	.0078
1	1.0000	.5000	.2500	.1250	.0625	.0313	.0156
2		.7500	.3750	.1875	.0938	.0469	.0234
3		1.0000	.6250	.3125	.1563	.0781	.0391
4			.7500	.4375	.2188	.1094	.0547
5			.8750	.5625	.3125	.1563	.0781
6			1.0000	.6875	.4063	.2188	.1094
7				.8125	.5000	.2813	.1484
8				.8750	.5937	.3438	.1875
9				.9375	.6875	.4219	.2344
10				1.0000	.7812	.5000	.2891
11					.8437	.5781	.3438
12					.9062	.6562	.4063
13					.9375	.7187	.4688
14					.9687	.7812	.5312

N	8	9	10	11	12	13	14
0	.0039	.0020	.0010	.0005	.0002	.0001	.0001
1	.0078	.0039	.0020	.0010	.0005	.0002	.0001
2	.0117	.0059	.0029	.0015	.0007	.0004	.0002
3	.0195	.0098	.0049	.0024	.0012	.0006	.0003
4	.0273	.0137	.0068	.0034	.0017	.0009	.0004
5	.0391	.0195	.0098	.0049	.0024	.0012	.0006
6	.0547	.0273	.0137	.0068	.0034	.0017	.0009
7	.0742	.0371	.0186	.0093	.0046	.0023	.0012
8	.0977	.0488	.0244	.0122	.0061	.0031	.0015
9	.1250	.0645	.0322	.0161	.0081	.0040	.0020
10	.1563	.0820	.0420	.0210	.0105	.0052	.0026
11	.1914	.1016	.0527	.0269	.0134	.0067	.0034
12	.2305	.1250	.0654	.0337	.0171	.0085	.0043
13	.2734	.1504	.0801	.0415	.0212	.0107	.0054
14	.3203	.1797	.0967	.0508	.0261	.0133	.0067
15	.3711	.2129	.1162	.0615	.0320	.0164	.0083
16	.4219	.2480	.1377	.0737	.0386	.0199	.0101
17	.4727	.2852	.1611	.0874	.0461	.0239	.0123
18	.5273	.3262	.1875	.1030	.0549	.0287	.0148
19	.5781	.3672	.2158	.1201	.0647	.0341	.0176
20	.6289	.4102	.2461	.1392	.0757	.0402	.0209
21	.6797	.4551	.2783	.1602	.0881	.0471	.0247
22	.7266	.5000	.3125	.1826	.1018	.0549	.0290
23	.7695	.5449	.3477	.2065	.1167	.0636	.0338
24	.8086	.5898	.3848	.2324	.1331	.0732	.0392
25	.8437	.6328	.4229	.2598	.1506	.0839	.0453
26	.8750	.6738	.4609	.2886	.1697	.0955	.0520
27	.9023	.7148	.5000	.3188	.1902	.1082	.0594
28	.9258	.7520	.5391	.3501	.2119	.1219	.0676
29	.9453	.7871	.5771	.3823	.2349	.1367	.0765
30	.9609	.8203	.6152	.4155	.2593	.1527	.0863
31	.9727	.8496	.6523	.4492	.2847	.1698	.0969
32	.9805	.8750	.6875	.4829	.3110	.1879	.1083

N	8	9	10	11	12	13	14
33	.9883	.8984	.7217	.5171	.3386	.2072	.1206
34	.9922	.9180	.7539	.5508	.3667	.2274	.1338
35	.9961	.9355	.7842	.5845	.3955	.2487	.1479
36	1.0000	.9512	.8125	.6177	.4250	.2709	.1629
37		.9629	.8389	.6499	.4548	.2939	.1788
38		.9727	.8623	.6812	.4849	.3177	.1955
39		.9805	.8838	.7114	.5151	.3424	.2131
40		.9863	.9033	.7402	.5452	.3677	.2316
41		.9902	.9199	.7676	.5750	.3934	.2508
42		.9941	.9346	.7935	.6045	.4197	.2708
43		.9961	.9473	.8174	.6333	.4463	.2915
44		.9980	.9580	.8398	.6614	.4730	.3129
45		1.0000	.9678	.8608	.6890	.5000	.3349
46			.9756	.8799	.7153	.5270	.3574
47			.9814	.8970	.7407	.5537	.3804
48			.9863	.9126	.7651	.5803	.4039
49			.9902	.9263	.7881	.6066	.4276
50			.9932	.9385	.8098	.6323	.4516
51			.9951	.9492	.8303	.6576	.4758
52			.9971	.9585	.8494	.6823	.5000

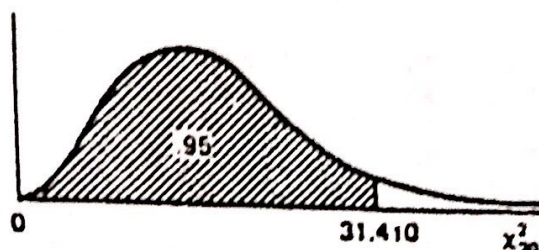
N	15	16	17	18	19	20
0	.0000	.0000	.0000	.0000	.0000	.0000
1	.0001	.0000	.0000	.0000	.0000	.0000
2	.0001	.0000	.0000	.0000	.0000	.0000
3	.0002	.0001	.0000	.0000	.0000	.0000
4	.0002	.0001	.0001	.0000	.0000	.0000
5	.0003	.0002	.0001	.0001	.0000	.0000
6	.0004	.0002	.0001	.0001	.0000	.0000
7	.0006	.0003	.0001	.0001	.0000	.0000
8	.0008	.0004	.0002	.0001	.0000	.0000
9	.0010	.0005	.0003	.0001	.0001	.0000
10	.0013	.0007	.0003	.0002	.0001	.0001
11	.0017	.0008	.0004	.0002	.0001	.0001
12	.0021	.0011	.0005	.0003	.0001	.0001
13	.0027	.0013	.0007	.0003	.0002	.0001
14	.0034	.0017	.0008	.0004	.0002	.0001
15	.0042	.0021	.0010	.0005	.0003	.0001
16	.0051	.0026	.0013	.0006	.0003	.0002
17	.0062	.0031	.0016	.0008	.0004	.0002
18	.0075	.0038	.0019	.0010	.0005	.0002
19	.0090	.0046	.0023	.0012	.0006	.0003
20	.0108	.0055	.0028	.0014	.0007	.0004
21	.0128	.0065	.0033	.0017	.0008	.0004
22	.0151	.0078	.0040	.0020	.0010	.0005
23	.0177	.0091	.0047	.0024	.0012	.0006
24	.0206	.0107	.0055	.0028	.0014	.0007
25	.0240	.0125	.0064	.0033	.0017	.0008
26	.0277	.0145	.0075	.0038	.0020	.0010
27	.0319	.0168	.0087	.0045	.0023	.0012

N	15	16	17	18	19	20
28	.0365	.0193	.0101	.0052	.0027	.0014
29	.0416	.0222	.0116	.0060	.0031	.0016
30	.0473	.0253	.0133	.0069	.0036	.0018
31	.0535	.0288	.0153	.0080	.0041	.0021
32	.0603	.0327	.0174	.0091	.0047	.0024
33	.0677	.0370	.0198	.0104	.0054	.0028
34	.0757	.0416	.0224	.0118	.0062	.0032
35	.0844	.0467	.0253	.0134	.0070	.0036
36	.0938	.0523	.0284	.0152	.0080	.0042
37	.1039	.0583	.0319	.0171	.0090	.0047
38	.1147	.0649	.0357	.0192	.0102	.0053
39	.1262	.0719	.0398	.0216	.0115	.0060
40	.1384	.0795	.0443	.0241	.0129	.0068
41	.1514	.0877	.0492	.0269	.0145	.0077
42	.1651	.0964	.0544	.0300	.0162	.0086
43	.1796	.1057	.0601	.0333	.0180	.0096
44	.1947	.1156	.0662	.0368	.0201	.0107
45	.2106	.1261	.0727	.0407	.0223	.0120
46	.2271	.1372	.0797	.0449	.0247	.0133
47	.2444	.1489	.0871	.0494	.0273	.0148
48	.2622	.1613	.0950	.0542	.0301	.0164
49	.2807	.1742	.1034	.0594	.0331	.0181
50	.2997	.1877	.1123	.0649	.0364	.0200
51	.3193	.2019	.1218	.0708	.0399	.0220
52	.3394	.2166	.1317	.0770	.0437	.0242
53	.3599	.2319	.1421	.0837	.0478	.0266
54	.3808	.2477	.1530	.0907	.0521	.0291
55	.4020	.2641	.1645	.0982	.0567	.0319
56	.4235	.2809	.1764	.1061	.0616	.0348
57	.4452	.2983	.1889	.1144	.0668	.0379
58	.4670	.3161	.2019	.1231	.0723	.0413
59	.4890	.3343	.2153	.1323	.0782	.0448
60	.5110	.3529	.2293	.1419	.0844	.0487
61	.5330	.3718	.2437	.1519	.0909	.0527
62	.5548	.3910	.2585	.1624	.0978	.0570
63	.5765	.4104	.2738	.1733	.1051	.0615
64	.5980	.4301	.2895	.1846	.1127	.0664
65	.6192	.4500	.3056	.1964	.1206	.0715
66	.6401	.4699	.3221	.2086	.1290	.0768
67	.6606	.4900	.3389	.2211	.1377	.0825
68	.6807	.5100	.3559	.2341	.1467	.0884
69	.7003	.5301	.3733	.2475	.1562	.0947
70	.7193	.5500	.3910	.2613	.1660	.1012
71	.7378	.5699	.4088	.2754	.1762	.1081
72	.7556	.5896	.4268	.2899	.1868	.1153
73	.7729	.6090	.4450	.3047	.1977	.1227
74	.7894	.6282	.4633	.3198	.2090	.1305
75	.8053	.6471	.4816	.3353	.2207	.1387
76	.8204	.6657	.5000	.3509	.2327	.1471
77	.8349	.6839	.5184	.3669	.2450	.1559
78	.8486	.7017	.5367	.3830	.2576	.1650
79	.8616	.7191	.5550	.3994	.2706	.1744

$\begin{matrix} N \\ v \end{matrix}$	15	16	17	18	19	20
80	.8738	.7359	.5732	.4159	.2839	.1841
81	.8853	.7523	.5912	.4325	.2974	.1942
82	.8961	.7681	.6090	.4493	.3113	.2045
83	.9062	.7834	.6267	.4661	.3254	.2152
84	.9156	.7981	.6441	.4831	.3397	.2262
85	.9243	.8123	.6611	.5000	.3543	.2375
86	.9323	.8258	.6779	.5169	.3690	.2490
87	.9397	.8387	.6944	.5339	.3840	.2608
88	.9465	.8511	.7105	.5507	.3991	.2729
89	.9527	.8628	.7262	.5675	.4144	.2853
90	.9584	.8739	.7415	.5841	.4298	.2979
91	.9635	.8844	.7563	.6006	.4453	.3108
92	.9681	.8943	.7707	.6170	.4609	.3238
93	.9723	.9036	.7847	.6331	.4765	.3371
94	.9760	.9123	.7981	.6491	.4922	.3506
95	.9794	.9205	.8111	.6647	.5078	.3643
96	.9823	.9281	.8236	.6802	.5235	.3781
97	.9849	.9351	.8355	.6953	.5391	.3921
98	.9872	.9417	.8470	.7101	.5547	.4062
99	.9892	.9477	.8579	.7246	.5702	.4204
100	.9910	.9533	.8683	.7387	.5856	.4347
101	.9925	.9584	.8782	.7525	.6009	.4492
102	.9938	.9630	.8877	.7659	.6160	.4636
103	.9949	.9673	.8966	.7789	.6310	.4782
104	.9958	.9712	.9050	.7914	.6457	.4927
105	.9966	.9747	.9129	.8036	.6603	.5073

جدول ۵: توزیع احتمال ضریب همبستگی Rs

d	P	d	P	d	P	d	P	d	P	d	P	d	P
N = 2		12	.0240	60	.2504	80	.1927	64	.0334	.	.	116	.0729
0	.5000	14	.0331	62	.2682	82	.2050	66	.0367	.	.	118	.0773
N = 3		16	.0440	64	.2911	84	.2183	68	.0403	.	.	120	.0817
0	.1667	18	.0548	66	.3095	86	.2315	70	.0441	12	.0000	122	.0865
2	.5000	20	.0694	68	.3323	88	.2467	72	.0481	14	.0000	124	.0913
N = 4		22	.0833	70	.3517	90	.2603	74	.0524	16	.0001	126	.0964
0	.0417	24	.1000	72	.3760	92	.2759	76	.0569	18	.0001	128	.1015
2	.1667	26	.1179	74	.3965	94	.2905	78	.0616	20	.0001	130	.1070
4	.2083	28	.1333	76	.4201	96	.3067	80	.0667	22	.0002	132	.1125
6	.3750	30	.1512	78	.4410	98	.3218	82	.0720	24	.0003	134	.1183
8	.4583	32	.1768	80	.4674	100	.3389	84	.0774	26	.0003	136	.1242
10	.5417	34	.1978	82	.4884	102	.3540	86	.0831	28	.0005	138	.1304
N = 5		36	.2222	84	.5116	104	.3718	88	.0893	30	.0006	140	.1365
0	.0083	38	.2488	N = 9		106	.3878	90	.0956	32	.0007	142	.1431
2	.0417	40	.2780	0	.0000	108	.4050	92	.1022	34	.0009	144	.1496
4	.0667	42	.2974	2	.0000	110	.4216	94	.1091	36	.0011	146	.1566
6	.1167	44	.3308	4	.0001	112	.4400	96	.1163	38	.0014	148	.1634
8	.1750	46	.3565	6	.0002	114	.4558	98	.1237	40	.0016	150	.1708
10	.2250	48	.3913	8	.0004	116	.4742	100	.1316	42	.0020	152	.1780
12	.2583	50	.4198	10	.0007	118	.4908	102	.1394	44	.0023	154	.1857
14	.3417	52	.4532	12	.0010	120	.5092	104	.1478	46	.0027	156	.1932
16	.3917	54	.4817	14	.0015	N = 10		106	.1564	48	.0032	158	.2012
18	.4750	56	.5183	16	.0023	0	.0000	108	.1652	50	.0037	160	.2091
20	.5250	N = 8		18	.0030	2	.0000	110	.1744	52	.0043	162	.2174
N = 6		0	.0000	20	.0041	4	.0000	112	.1839	54	.0049	164	.2255
0	.0014	2	.0002	22	.0054	6	.0000	114	.1935	56	.0056	166	.2342
2	.0083	4	.0006	24	.0069	8	.0001	116	.2035	58	.0064	168	.2427
4	.0167	6	.0011	26	.0086	10	.0001	118	.2135	60	.0072	170	.2517
6	.0292	8	.0023	28	.0107	12	.0002	120	.2241	62	.0081	172	.2604
8	.0514	10	.0036	30	.0127	14	.0003	122	.2349	64	.0091	174	.2697
10	.0681	12	.0054	32	.0156	16	.0004	124	.2459	66	.0102	176	.2787
12	.0875	14	.0077	34	.0184	18	.0006	126	.2567	68	.0113	178	.2883
14	.1208	16	.0109	36	.0216	20	.0008	128	.2683	70	.0126	180	.2975
16	.1486	18	.0140	38	.0252	22	.0011	130	.2801	72	.0139	182	.3073
18	.1778	20	.0184	40	.0294	24	.0014	132	.2918	74	.0153	184	.3168
20	.2097	22	.0229	42	.0333	26	.0019	134	.3037	76	.0168	186	.3269
22	.2486	24	.0288	44	.0380	28	.0024	136	.3161	78	.0184	188	.3366
24	.2819	26	.0347	46	.0429	30	.0029	138	.3284	80	.0201	190	.3469
26	.3292	28	.0415	48	.0484	32	.0036	140	.3410	82	.0220	192	.3568
28	.3569	30	.0481	50	.0540	34	.0044	142	.3536	84	.0239	194	.3673
30	.4014	32	.0575	52	.0603	36	.0053	144	.3665	86	.0260	196	.3773
32	.4597	34	.0661	54	.0664	38	.0063	146	.3795	88	.0281	198	.3879
34	.5000	36	.0756	56	.0738	40	.0075	148	.3925	90	.0304	200	.3982
N = 7		38	.0855	58	.0809	42	.0087	150	.4056	92	.0328	202	.4090
0	.0002	40	.0983	60	.0888	44	.0101	152	.4191	94	.0354	204	.4192
2	.0014	42	.1081	62	.0969	46	.0117	154	.4326	96	.0380	206	.4302
4	.0034	44	.1215	64	.1063	48	.0134	156	.4458	98	.0409	208	.4406
6	.0062	46	.1337	66	.1149	50	.0153	158	.4592	100	.0438	210	.4516
8	.0119	48	.1496	68	.1250	52	.0173	160	.4730	102	.0470	212	.4621
10	.0171	50	.1634	70	.1348	54	.0195	162	.4865	104	.0502	214	.4731
N = 11		52	.1799	72	.1456	56	.0219	164	.5000	106	.0536	216	.4837
0	.0000	54	.1947	74	.1563	58	.0245	N = 11		108	.0571	218	.4947
2	.0000	56	.2139	76	.1681	60	.0272	0	.0000	110	.0609	220	.5053
		58	.2309	78	.1793	62	.0302	2	.0000	112	.0647		
										114	.0688		

جدول ۶: توزیع χ^2 

درجه آزادی	$\chi^2_{.000}$	$\chi^2_{.001}$	$\chi^2_{.005}$	$\chi^2_{.010}$	$\chi^2_{.025}$	$\chi^2_{.050}$	$\chi^2_{.100}$	$\chi^2_{.200}$	$\chi^2_{.300}$	$\chi^2_{.400}$	$\chi^2_{.500}$	$\chi^2_{.600}$	$\chi^2_{.700}$	$\chi^2_{.800}$	$\chi^2_{.900}$
1	.000	.000	.001	.004	.016	.064	.148	.455	1.07	1.64	2.71	3.84	5.02	6.63	7.88
2	.010	.020	.051	.103	.211	.446	.713	1.39	2.41	3.22	4.61	5.99	7.38	9.21	10.6
3	.072	.115	.216	.352	.584	1.00	1.42	2.37	3.66	4.64	6.25	7.81	9.35	11.3	12.8
4	.207	.297	.484	.711	1.06	1.65	2.20	3.36	4.88	5.99	7.78	9.49	11.1	13.3	14.9
5	.412	.554	.831	1.15	1.61	2.34	3.00	4.35	6.06	7.29	9.24	11.1	12.8	15.1	16.7
6	.676	.872	1.24	1.64	2.20	3.07	3.83	5.35	7.23	8.56	10.6	12.6	14.4	16.8	18.5
7	.989	1.24	1.69	2.17	2.83	3.82	4.67	6.35	8.38	9.80	12.0	14.1	16.0	18.5	20.3
8	1.34	1.65	2.18	2.73	3.49	4.59	5.53	7.34	9.52	11.0	13.4	15.5	17.5	20.1	22.0
9	1.73	2.09	2.70	3.33	4.17	5.38	6.39	8.34	10.7	12.2	14.7	16.9	19.0	21.7	23.6
10	2.16	2.56	3.25	3.94	4.87	6.18	7.27	9.34	11.8	13.4	16.0	18.3	20.5	23.2	25.2
11	2.60	3.05	3.82	4.57	5.58	6.99	8.15	10.3	12.9	14.6	17.3	19.7	21.9	24.7	26.8
12	3.07	3.57	4.40	5.23	6.30	7.81	9.03	11.3	14.0	15.8	18.5	21.0	23.3	26.2	28.3
13	3.57	4.11	5.01	5.89	7.04	8.63	9.93	12.3	15.1	17.0	19.8	22.4	24.7	27.7	29.8
14	4.07	4.66	5.63	6.57	7.79	9.47	10.8	13.3	16.2	18.2	21.1	23.7	26.1	29.1	31.3
15	4.60	5.23	6.26	7.26	8.55	10.3	11.7	14.3	17.3	19.3	22.3	25.0	27.5	30.6	32.8
16	5.14	5.81	6.91	7.96	9.31	11.2	12.6	15.3	18.4	20.5	23.5	26.3	28.8	32.0	34.3
17	5.70	6.41	7.56	8.67	10.1	12.0	13.5	16.3	19.5	21.6	24.8	27.6	30.2	33.4	35.7
18	6.26	7.01	8.23	9.39	10.9	12.9	14.4	17.3	20.6	22.8	26.0	28.9	31.5	34.8	37.2
19	6.83	7.63	8.91	10.1	11.7	13.7	15.4	18.3	21.7	23.9	27.2	30.1	32.9	36.2	38.6
20	7.43	8.26	9.59	10.9	12.4	14.6	16.3	19.3	22.8	25.0	28.4	31.4	34.2	37.6	40.0
21	8.03	8.90	10.3	11.6	13.2	15.4	17.2	20.3	23.9	26.2	29.6	32.7	35.5	38.9	41.4
22	8.64	9.54	11.0	12.3	14.0	16.3	18.1	21.3	24.9	27.3	30.8	33.9	36.8	40.3	42.8
23	9.26	10.2	11.7	13.1	14.8	17.2	19.0	22.3	26.0	28.4	32.0	35.2	38.1	41.6	44.2
24	9.89	10.9	12.4	13.8	15.7	18.1	19.9	23.3	27.1	29.6	33.2	36.4	39.4	43.0	45.6
25	10.5	11.5	13.1	14.6	16.5	18.9	20.9	24.3	28.2	30.7	34.4	37.7	40.6	44.3	46.9
26	11.2	12.2	13.8	15.4	17.3	19.8	21.8	25.3	29.2	31.8	35.6	38.9	41.9	45.6	48.3
27	11.8	12.9	14.6	16.2	18.1	20.7	22.7	26.3	30.3	32.9	36.7	40.1	43.2	47.0	49.6
28	12.5	13.6	15.3	16.9	18.9	21.6	23.6	27.3	31.4	34.0	37.9	41.3	44.5	48.3	51.0
29	13.1	14.3	16.0	17.7	19.8	22.5	24.6	28.3	32.5	35.1	39.1	42.6	45.7	49.6	52.3
30	13.8	15.0	16.8	18.5	20.6	23.4	25.5	29.3	33.5	36.2	40.3	43.8	47.0	50.9	53.7
40	20.7	22.1	24.4	26.5	29.0	32.3	34.9	39.3	44.2	47.3	51.8	55.8	59.3	63.7	66.8
50	28.0	29.7	32.3	34.8	37.7	41.3	44.3	49.3	54.7	58.2	63.2	67.5	71.4	76.2	79.5
60	35.5	37.5	40.5	43.2	46.5	50.6	53.8	59.3	65.2	69.0	74.4	79.1	83.3	88.4	92.0

Source. Adapted by permission from Table 1 of Leslie H. Miller, Table of Percentage points of Kolmogorov statistics, *J. Am. Stat. Assoc.* 51 (1956), 111-121.

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One-Sided Test:

 $\alpha = .10 \quad .05 \quad .025 \quad .01 \quad .005 \quad \alpha = .10 \quad .05 \quad .025 \quad .01 \quad .005$

Two-Sided Test:

 $\alpha = .20 \quad .10 \quad .05 \quad .02 \quad .01 \quad \alpha = .20 \quad .10 \quad .05 \quad .02 \quad .01$

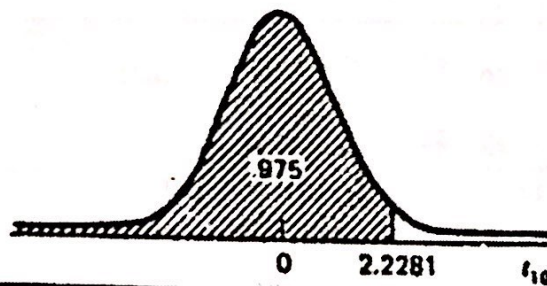
$n = 3$	2/3	2/3				$n = 20$	6/20	7/20	8/20	9/20	10/20
4	3/4	3/4	3/4			21	6/21	7/21	8/21	9/21	10/21
5	3/5	3/5	4/5	4/5	4/5	22	7/22	8/22	8/22	10/22	10/22
6	3/6	4/6	4/6	5/6	5/6	23	7/23	8/23	9/23	10/23	10/23
7	4/7	4/7	5/7	5/7	5/7	24	7/24	8/24	9/24	10/24	11/24
8	4/8	4/8	5/8	5/8	6/8	25	7/25	8/25	9/25	10/25	11/25
9	4/9	5/9	5/9	6/9	6/9	26	7/26	8/26	9/26	10/26	11/26
10	4/10	5/10	6/10	6/10	7/10	27	7/27	8/27	9/27	11/27	11/27
11	5/11	5/11	6/11	7/11	7/11	28	8/28	9/28	10/28	11/28	12/28
12	5/12	5/12	6/12	7/12	7/12	29	8/29	9/29	10/29	11/29	12/29
13	5/13	6/13	6/13	7/13	8/13	30	8/30	9/30	10/30	11/30	12/30
14	5/14	6/14	7/14	7/14	8/14	31	8/31	9/31	10/31	11/31	12/31
15	5/15	6/15	7/15	8/15	8/15	32	8/32	9/32	10/32	12/32	12/32
16	6/16	6/16	7/16	8/16	9/16	34	8/34	10/34	11/34	12/34	13/34
17	6/17	7/17	7/17	8/17	9/17	36	9/36	10/36	11/36	12/36	13/36
18	6/18	7/18	8/18	9/18	9/18	38	9/38	10/38	11/38	13/38	14/38
19	6/19	7/19	8/19	9/19	9/19	40	9/40	10/40	12/40	13/40	14/40
Approximation for $n > 40$:							$\frac{1.52}{\sqrt{n}}$	$\frac{1.73}{\sqrt{n}}$	$\frac{1.92}{\sqrt{n}}$	$\frac{2.15}{\sqrt{n}}$	$\frac{2.30}{\sqrt{n}}$

Source. Adapted by permission from Tables 2 and 3 of Z. W. Birnbaum and R. A. Hall, Small sample distributions for multisample statistics of the Smirnov type, *Ann. Math. Stat.* 31 (1960), 710-720.

جدول ۸: توزیع دو نمونه‌ای کولموگروف-اسمیرنوف

One-Sided Test:		$\alpha =$	.10	.05	.025	.01	.005
Two-Sided Test:		$\alpha =$	.20	.10	.05	.02	.01
$N_1 = 1$	$N_2 = 9$		17/18				
	10		9/10				
$N_1 = 2$	$N_2 = 3$		5/6				
	4		3/4				
	5		4/5	4/5			
	6		5/6	5/6			
	7		5/7	6/7			
	8		3/4	7/8	7/8		
	9		7/9	8/9	8/9		
	10		7/10	4/5	9/10		
$N_1 = 3$	$N_2 = 4$		3/4	3/4			
	5		2/3	4/5	4/5		
	6		2/3	2/3	5/6		
	7		2/3	5/7	6/7	6/7	
	8		5/8	3/4	3/4	7/8	
	9		2/3	2/3	7/9	8/9	8/9
	10		3/5	7/10	4/5	9/10	9/10
	12		7/12	2/3	3/4	5/6	11/12
$N_1 = 4$	$N_2 = 5$		3/5	3/4	4/5	4/5	
	6		7/12	2/3	3/4	5/6	5/6
	7		17/28	5/7	3/4	6/7	6/7
	8		5/8	5/8	3/4	7/8	7/8
	9		5/9	2/3	3/4	7/9	8/9
	10		11/20	13/20	7/10	4/5	4/5
	12		7/12	2/3	2/3	3/4	5/6
	16		9/16	5/8	11/16	3/4	13/16
$N_1 = 5$	$N_2 = 6$		3/5	2/3	2/3	5/6	5/6
	7		4/7	23/35	5/7	29/35	6/7
	8		11/20	5/8	27/40	4/5	4/5
	9		5/9	3/5	31/45	7/9	4/5
	10		1/2	3/5	7/10	7/10	4/5
	15		8/15	3/5	2/3	11/15	11/15
	20		1/2	11/20	3/5	7/10	3/4
$N_1 = 6$	$N_2 = 7$		23/42	4/7	29/42	5/7	5/6
	8		1/2	7/12	2/3	3/4	3/4
	9		1/2	5/9	2/3	13/18	7/9

جدول ۹- توزیع T



درجه آزادی	$t_{.65}$	$t_{.60}$	$t_{.55}$	$t_{.50}$	$t_{.45}$	$t_{.40}$	$t_{.35}$	$t_{.30}$	$t_{.25}$	$t_{.20}$	$t_{.15}$	$t_{.10}$	$t_{.05}$	$t_{.025}$	$t_{.01}$
1	.158	.325	.510	.727	1.00	1.38	1.96	3.08	6.31	12.7	31.8	63.7	127	318	637
2	.142	.289	.445	.617	.816	1.06	1.39	1.89	2.92	4.30	6.96	9.92	12.9	31.6	63.6
3	.137	.277	.424	.584	.765	.978	1.25	1.64	2.35	3.18	4.54	5.84	7.29	17.0	34.0
4	.134	.271	.414	.569	.741	.941	1.19	1.53	2.13	2.78	3.75	4.60	5.61	13.0	26.0
5	.132	.267	.408	.559	.727	.920	1.16	1.48	2.01	2.57	3.36	4.03	4.86	11.0	22.0
6	.131	.265	.404	.553	.718	.906	1.13	1.44	1.94	2.45	3.14	3.71	4.56	10.0	20.0
7	.130	.263	.402	.549	.711	.896	1.12	1.42	1.90	2.36	3.00	3.50	4.40	9.0	18.0
8	.130	.262	.399	.546	.706	.889	1.11	1.40	1.86	2.31	2.90	3.36	4.04	8.0	16.0
9	.129	.261	.398	.543	.703	.883	1.10	1.38	1.83	2.26	2.82	3.25	3.78	7.0	14.0
10	.129	.260	.397	.542	.700	.879	1.09	1.37	1.81	2.23	2.76	3.17	3.69	6.0	12.0
11	.129	.260	.396	.540	.697	.876	1.09	1.36	1.80	2.20	2.72	3.11	3.64	5.0	10.0
12	.128	.259	.395	.539	.695	.873	1.08	1.36	1.78	2.18	2.68	3.06	3.59	4.0	8.0
13	.128	.259	.394	.538	.694	.870	1.08	1.35	1.77	2.16	2.65	3.01	3.54	3.0	6.0
14	.128	.258	.393	.537	.692	.868	1.08	1.34	1.76	2.14	2.62	2.98	3.50	2.0	4.0
15	.128	.258	.393	.536	.691	.866	1.07	1.34	1.75	2.13	2.60	2.95	3.47	1.0	2.0
16	.128	.258	.392	.535	.690	.865	1.07	1.34	1.75	2.12	2.58	2.92	3.44	0.5	1.0
17	.128	.257	.392	.534	.689	.863	1.07	1.33	1.74	2.11	2.57	2.90	3.41	0.2	0.5
18	.127	.257	.392	.534	.688	.862	1.07	1.33	1.73	2.10	2.55	2.88	3.38	0.1	0.2
19	.127	.257	.391	.533	.688	.861	1.07	1.33	1.73	2.09	2.54	2.86	3.35	0.05	0.1
20	.127	.257	.391	.533	.687	.860	1.06	1.32	1.72	2.09	2.53	2.84	3.32	0.02	0.05
21	.127	.257	.391	.532	.686	.859	1.06	1.32	1.72	2.08	2.52	2.83	3.29	0.01	0.02
22	.127	.256	.390	.532	.686	.858	1.06	1.32	1.72	2.07	2.51	2.82	3.26	0.005	0.01
23	.127	.256	.390	.532	.685	.858	1.06	1.32	1.71	2.07	2.50	2.81	3.23	0.002	0.005
24	.127	.256	.390	.531	.685	.857	1.06	1.32	1.71	2.06	2.49	2.80	3.20	0.001	0.002
25	.127	.256	.390	.531	.684	.856	1.06	1.32	1.71	2.06	2.48	2.79	3.17	0.0005	0.001
26	.127	.256	.390	.531	.684	.856	1.06	1.32	1.70	2.06	2.48	2.78	3.14	0.0002	0.0005
27	.127	.256	.389	.531	.684	.855	1.06	1.31	1.70	2.05	2.47	2.77	3.11	0.0001	0.0002
28	.127	.256	.389	.530	.683	.855	1.06	1.31	1.70	2.05	2.47	2.76	3.08	0.00005	0.0001
29	.127	.256	.389	.530	.683	.854	1.05	1.31	1.70	2.04	2.46	2.76	3.05	0.00002	0.00005
30	.127	.256	.389	.530	.683	.854	1.05	1.31	1.70	2.04	2.46	2.75	3.02	0.00001	0.00002
∞	.126	.253	.385	.524	.674	.842	1.04	1.28	1.64	1.96	2.33	2.58	3.29		

جدول ١٠ - توزيع بواسن

r	μ								
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	0.9048	0.8187	0.7408	0.6730	0.6065	0.5488	0.4966	0.4493	0.4066
1	0.9953	0.9825	0.9631	0.9384	0.9098	0.8781	0.8442	0.8088	0.7725
2	0.9998	0.9989	0.9964	0.9921	0.9856	0.9769	0.9659	0.9526	0.9371
3	1.0000	0.9999	0.9997	0.9992	0.9982	0.9966	0.9942	0.9909	0.9865
4		1.0000	1.0000	0.9999	0.9998	0.9996	0.9992	0.9986	0.9977
5				1.0000	1.0000	1.0000	0.9999	0.9998	0.9997
6							1.0000	1.0000	1.0000

r	μ								
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
0	0.3679	0.2231	0.1353	0.0821	0.0498	0.0302	0.0183	0.0111	0.0067
1	0.7358	0.5578	0.4060	0.2873	0.1991	0.1359	0.0916	0.0611	0.0404
2	0.9197	0.8088	0.6767	0.5438	0.4232	0.3208	0.2381	0.1736	0.1247
3	0.9810	0.9344	0.8571	0.7576	0.6472	0.5366	0.4335	0.3423	0.2650
4	0.9963	0.9814	0.9473	0.8912	0.8153	0.7254	0.6288	0.5321	0.4405
5	0.9994	0.9955	0.9834	0.9580	0.9161	0.8576	0.7851	0.7029	0.6160
6	0.9999	0.9991	0.9955	0.9858	0.9665	0.9347	0.8893	0.8311	0.7622
7	1.0000	0.9998	0.9989	0.9958	0.9881	0.9733	0.9489	0.9134	0.8666
8		1.0000	0.9998	0.9989	0.9962	0.9901	0.9786	0.9597	0.9319
9			1.0000	0.9997	0.9989	0.9967	0.9919	0.9829	0.9682
10				0.9999	0.9997	0.9990	0.9972	0.9933	0.9863
11				1.0000	0.9999	0.9997	0.9991	0.9976	0.9945
12					1.0000	0.9999	0.9997	0.9992	0.9980
13						1.0000	0.9999	0.9997	0.9993
14							1.0000	0.9999	0.9998
15								1.0000	0.9999
16									1.0000

r	μ								
	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5
0	0.0041	0.0025	0.0015	0.0009	0.0006	0.0003	0.0002	0.0001	0.0001
1	0.0266	0.0174	0.0113	0.0073	0.0047	0.0030	0.0019	0.0012	0.0008
2	0.0884	0.0620	0.0430	0.0296	0.0203	0.0138	0.0093	0.0062	0.0042
3	0.2017	0.1512	0.1118	0.0818	0.0591	0.0424	0.0301	0.0212	0.0149
4	0.3575	0.2851	0.2237	0.1730	0.1321	0.0996	0.0744	0.0550	0.0403
5	0.5289	0.4457	0.3690	0.3007	0.2414	0.1912	0.1496	0.1157	0.0885
6	0.6860	0.6063	0.5265	0.4497	0.3782	0.3134	0.2562	0.2068	0.1649
7	0.8095	0.7440	0.6728	0.5987	0.5246	0.4530	0.3856	0.3239	0.2687
8	0.8944	0.8472	0.7916	0.7291	0.6620	0.5925	0.5231	0.4557	0.3918
9	0.9462	0.9161	0.8774	0.8305	0.7764	0.7166	0.6530	0.5874	0.5218
10	0.9747	0.9574	0.9332	0.9015	0.8622	0.8159	0.7634	0.7060	0.6453
11	0.9890	0.9799	0.9661	0.9466	0.9208	0.8881	0.8487	0.8030	0.7520
12	0.9955	0.9912	0.9840	0.9730	0.9573	0.9362	0.9091	0.8758	0.8364
13	0.9983	0.9964	0.9929	0.9872	0.9784	0.9658	0.9486	0.9261	0.8981
14	0.9994	0.9986	0.9970	0.9943	0.9897	0.9827	0.9726	0.9585	0.9400
15	0.9998	0.9995	0.9988	0.9976	0.9954	0.9918	0.9862	0.9780	0.9665
16	0.9999	0.9998	0.9996	0.9990	0.9980	0.9963	0.9934	0.9889	0.9823
17	1.0000	0.9999	0.9998	0.9996	0.9992	0.9984	0.9970	0.9947	0.9911
18		1.0000	0.9999	0.9999	0.9997	0.9994	0.9987	0.9976	0.9957
19			1.0000	1.0000	0.9999	0.9997	0.9995	0.9989	0.9980
20					1.0000	0.9999	0.9998	0.9996	0.9991
21						1.0000	0.9999	0.9998	0.9996
22							1.0000	0.9999	0.9999
23								1.0000	0.9999
24									1.0000