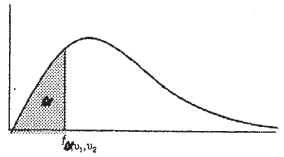
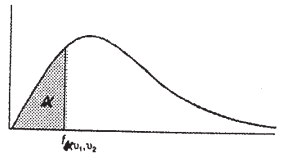
جدول (04) : قيم توزيع فيشر F



$P(F \leq f_{\alpha,\upsilon_1,\upsilon_2}) = \alpha$

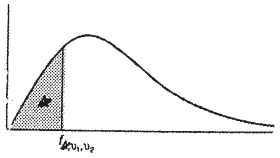
$\alpha = .01$										
	υ_1									
υ_2	1	2	3	4	5	6	7	8	9	10
1	.00	.01	.03	.05	.06	.07	.08	.09	.09	.10
2	.00	.01	.03	.06	.08	.09	.10	.12	.12	.13
3	.00	.01	.03	.06	.08	.10	.12	.13	.14	.15
4	.00	.01	.03	.06	.09	.11	.13	.14	.16	.17
5	.00	.01	.04	.06	.09	.11	.13	.15	.17	.18
6	.00	.01	.04	.07	.09	.12	.14	.16	.17	.19
7	.00	.01	.04	.07	.10	.12	.14	.16	.18	.19
8	.00	.01	.04	.07	.10	.12	.15	.17	.18	.20
9	.00	.01	.04	.07	.10	.13	.15	.17	.19	.20
10	.00	.01	.04	.07	.10	.13	.15	.17	.19	.21
11	.00	.01	.04	.07	.10	.13	.15	.17	.19	.21
12	.00	.01	.04	.07	.10	.13	.15	.18	.20	.21
13	.00	.01	.04	.07	.10	.13	.16	.18	.20	.22
14	.00	.01	.04	.07	.10	.13	.16	.18	.20	.22
15	.00	.01	.04	.07	.10	.13	.16	.18	.20	.22
16	.00	.01	.04	.07	.10	.13	.16	.18	.20	.22
17	.00	.01	.04	.07	.10	.13	.16	.18	.20	.22
18	.00	.01	.04	.07	.10	.13	.16	.18	.21	.22
19	.00	.01	.04	.07	.10	.13	.16	.19	.21	.23
20	.00	.01	.04	.07	.10	.14	.16	.19	.21	.23
21	.00	.01	.04	.07	.10	.14	.16	.19	.21	.23
22	.00	.01	.04	.07	.11	.14	.16	.19	.21	.23
23	.00	.01	.04	.07	.11	.14	.16	.19	.21	.23
24	.00	.01	.04	.07	.11	.14	.16	.19	.21	.23
25	.00	.01	.04	.07	.11	.14	.17	.19	.21	.23
26	.00	.01	.04	.07	.11	.14	.17	.19	.21	.23
27	.00	.01	.04	.07	.11	.14	.17	.19	.21	.23
28	.00	.01	.04	.07	.11	.14	.17	.19	.21	.23
29	.00	.01	.04	.07	.11	.14	.17	.19	.21	.23
30	.00	.01	.04	.07	.11	.14	.17	.19	.22	.24
35	.00	.01	.04	.07	.11	.14	.17	.19	.22	.24
40	.00	.01	.04	.07	.11	.14	.17	.20	.22	.24
50	.00	.01	.04	.07	.11	.14	.17	.20	.22	.24
60	.00	.01	.04	.07	.11	.14	.17	.20	.22	.24
80	.00	.01	.04	.07	.11	.14	.17	.20	.23	.25
100	.00	.01	.04	.07	.11	.14	.17	.20	.23	.25
200	.00	.01	.04	.07	.11	.14	.18	.20	.23	.25
500	.00	.01	.04	.07	.11	.14	.18	.20	.23	.25
1000	.00	.01	.04	.07	.11	.15	.18	.21	.23	.26

تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .01$										
	υ_1									
υ_2	11	12	15	20	25	30	40	50	100	1000
1	.10	.11	.12	.12	.13	.13	.14	.14	.15	.15
2	.14	.14	.16	.17	.18	.19	.19	.20	.21	.22
3	.16	.17	.18	.20	.21	.22	.23	.24	.25	.26
4	.18	.18	.20	.23	.24	.25	.26	.27	.28	.30
5	.19	.20	.22	.24	.26	.27	.28	.29	.31	.33
6	.20	.21	.23	.26	.28	.29	.30	.31	.33	.35
7	.20	.22	.24	.27	.29	.30	.32	.33	.35	.38
8	.21	.22	.25	.28	.30	.32	.33	.35	.37	.40
9	.22	.23	.26	.29	.31	.33	.35	.36	.39	.41
10	.22	.23	.26	.30	.32	.34	.36	.37	.40	.43
11	.22	.24	.27	.30	.33	.34	.37	.38	.41	.44
12	.23	.24	.27	.31	.33	.35	.38	.39	.42	.45
13	.23	.24	.28	.31	.34	.36	.38	.40	.43	.47
14	.23	.25	.28	.32	.35	.36	.39	.41	.44	.48
15	.24	.25	.28	.32	.35	.37	.40	.41	.45	.49
16	.24	.25	.29	.33	.36	.38	.40	.42	.46	.50
17	.24	.25	.29	.33	.36	.38	.41	.43	.46	.50
18	.24	.26	.29	.33	.36	.38	.41	.43	.47	.51
19	.24	.26	.29	.34	.37	.39	.42	.44	.48	.52
20	.24	.26	.30	.34	.37	.39	.42	.44	.48	.53
21	.25	.26	.30	.34	.37	.40	.43	.45	.49	.53
22	.25	.26	.30	.35	.38	.40	.43	.45	.49	.54
23	.25	.26	.30	.35	.38	.40	.43	.45	.50	.55
24	.25	.26	.30	.35	.38	.41	.44	.46	.50	.55
25	.25	.27	.31	.35	.38	.41	.44	.46	.51	.56
26	.25	.27	.31	.35	.39	.41	.44	.46	.51	.56
27	.25	.27	.31	.36	.39	.41	.45	.47	.52	.57
28	.25	.27	.31	.36	.39	.41	.45	.47	.52	.57
29	.25	.27	.31	.36	.39	.42	.45	.47	.52	.58
30	.25	.27	.31	.36	.39	.42	.45	.48	.53	.58
35	.26	.27	.32	.37	.40	.43	.46	.49	.54	.60
40	.26	.28	.32	.37	.41	.43	.47	.50	.56	.62
50	.26	.28	.32	.38	.42	.45	.49	.51	.58	.65
60	.26	.28	.33	.38	.42	.45	.50	.52	.59	.67
80	.27	.29	.33	.39	.43	.46	.51	.54	.61	.70
100	.27	.29	.34	.39	.44	.47	.52	.55	.63	.72
200	.27	.29	.34	.40	.45	.48	.53	.57	.66	.78
500	.28	.30	.35	.41	.46	.49	.55	.58	.68	.84
1000	.28	.30	.35	.41	.46	.50	.55	.59	.69	.86

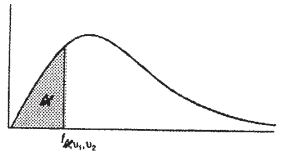
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .025$

υ_2	υ_1									
	1	2	3	4	5	6	7	8	9	10
1	.00	.03	.06	.08	.10	.11	.12	.13	.14	.14
2	.00	.03	.06	.09	.12	.14	.15	.17	.17	.18
3	.00	.03	.06	.10	.13	.15	.17	.18	.20	.21
4	.00	.03	.07	.10	.14	.16	.18	.20	.21	.22
5	.00	.03	.07	.11	.14	.17	.19	.21	.22	.24
6	.00	.03	.07	.11	.14	.17	.20	.21	.23	.25
7	.00	.03	.07	.11	.15	.18	.20	.22	.24	.25
8	.00	.03	.07	.11	.15	.18	.20	.23	.24	.26
9	.00	.03	.07	.11	.15	.18	.21	.23	.25	.26
10	.00	.03	.07	.11	.15	.18	.21	.23	.25	.27
11	.00	.03	.07	.11	.15	.18	.21	.24	.26	.27
12	.00	.03	.07	.11	.15	.19	.21	.24	.26	.28
13	.00	.03	.07	.11	.15	.19	.22	.24	.26	.28
14	.00	.03	.07	.12	.15	.19	.22	.24	.26	.28
15	.00	.03	.07	.12	.16	.19	.22	.24	.27	.28
16	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
17	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
18	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
19	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
20	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
21	.00	.03	.07	.12	.16	.19	.22	.25	.27	.29
22	.00	.03	.07	.12	.16	.19	.23	.25	.27	.30
23	.00	.03	.07	.12	.16	.20	.23	.25	.28	.30
24	.00	.03	.07	.12	.16	.20	.23	.25	.28	.30
25	.00	.03	.07	.12	.16	.20	.23	.25	.28	.30
26	.00	.03	.07	.12	.16	.20	.23	.25	.28	.30
27	.00	.03	.07	.12	.16	.20	.23	.26	.28	.30
28	.00	.03	.07	.12	.16	.20	.23	.26	.28	.30
29	.00	.03	.07	.12	.16	.20	.23	.26	.28	.30
30	.00	.03	.07	.12	.16	.20	.23	.26	.28	.30
35	.00	.03	.07	.12	.16	.20	.23	.26	.28	.30
40	.00	.03	.07	.12	.16	.20	.23	.26	.29	.31
50	.00	.03	.07	.12	.16	.20	.23	.26	.29	.31
60	.00	.03	.07	.12	.16	.20	.24	.26	.29	.31
80	.00	.03	.07	.12	.16	.20	.24	.27	.29	.32
100	.00	.03	.07	.12	.16	.20	.24	.27	.29	.32
200	.00	.03	.07	.12	.17	.20	.24	.27	.30	.32
500	.00	.03	.07	.12	.17	.21	.24	.27	.30	.32
1000	.00	.03	.07	.12	.17	.21	.24	.27	.30	.32

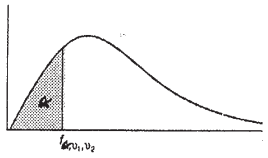
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .025$

υ_2	υ_1									
	11	12	15	20	25	30	40	50	100	1000
1	.15	.15	.16	.17	.18	.18	.18	.19	.19	.20
2	.19	.20	.21	.22	.23	.24	.25	.25	.26	.27
3	.22	.22	.24	.26	.27	.28	.29	.29	.31	.32
4	.23	.24	.26	.28	.30	.31	.32	.33	.34	.36
5	.25	.26	.28	.30	.32	.33	.34	.35	.37	.39
6	.26	.27	.29	.32	.34	.35	.36	.37	.39	.41
7	.27	.28	.30	.33	.35	.36	.38	.39	.41	.43
8	.27	.28	.31	.34	.36	.38	.40	.41	.43	.45
9	.28	.29	.32	.35	.37	.39	.41	.42	.45	.47
10	.28	.30	.33	.36	.38	.40	.42	.43	.46	.49
11	.29	.30	.33	.37	.39	.41	.43	.44	.47	.50
12	.29	.31	.34	.37	.40	.41	.44	.45	.48	.51
13	.29	.31	.34	.38	.40	.42	.44	.46	.49	.52
14	.30	.31	.35	.38	.41	.43	.45	.47	.50	.53
15	.30	.31	.35	.39	.41	.43	.46	.47	.51	.54
16	.30	.32	.35	.39	.42	.44	.46	.48	.52	.55
17	.30	.32	.36	.40	.42	.44	.47	.49	.52	.56
18	.31	.32	.36	.40	.43	.45	.47	.49	.53	.57
19	.31	.32	.36	.40	.43	.45	.48	.50	.54	.57
20	.31	.33	.36	.41	.43	.46	.48	.50	.54	.58
21	.31	.33	.36	.41	.44	.46	.49	.51	.55	.59
22	.31	.33	.37	.41	.44	.46	.49	.51	.55	.59
23	.31	.33	.37	.41	.44	.47	.49	.51	.56	.60
24	.32	.33	.37	.42	.45	.47	.50	.52	.56	.60
25	.32	.33	.37	.42	.45	.47	.50	.52	.56	.61
26	.32	.33	.37	.42	.45	.47	.50	.52	.57	.61
27	.32	.33	.37	.42	.45	.48	.51	.53	.57	.62
28	.32	.34	.38	.42	.45	.48	.51	.53	.58	.62
29	.32	.34	.38	.42	.46	.48	.51	.53	.58	.63
30	.32	.34	.38	.43	.46	.48	.51	.54	.58	.63
35	.32	.34	.38	.43	.47	.49	.53	.55	.60	.65
40	.33	.34	.39	.44	.47	.50	.53	.56	.61	.67
50	.33	.35	.39	.44	.48	.51	.55	.57	.63	.69
60	.33	.35	.40	.45	.49	.52	.55	.58	.64	.71
80	.34	.35	.40	.46	.50	.53	.57	.59	.66	.74
100	.34	.36	.40	.46	.50	.53	.57	.60	.67	.76
200	.34	.36	.41	.47	.51	.54	.59	.62	.70	.81
500	.35	.36	.41	.48	.52	.55	.60	.64	.73	.86
1000	.35	.37	.42	.48	.52	.56	.61	.64	.73	.88

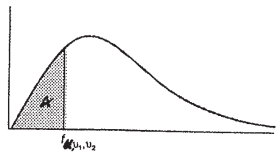
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .05$

υ_2	υ_1									
	1	2	3	4	5	6	7	8	9	10
1	.01	.05	.10	.13	.15	.17	.18	.19	.20	.20
2	.01	.05	.10	.14	.17	.19	.21	.22	.23	.24
3	.00	.05	.11	.15	.18	.21	.23	.25	.26	.27
4	.00	.05	.11	.16	.19	.22	.24	.26	.28	.29
5	.00	.05	.11	.16	.20	.23	.25	.27	.29	.30
6	.00	.05	.11	.16	.20	.23	.26	.28	.30	.31
7	.00	.05	.11	.16	.21	.24	.26	.29	.30	.32
8	.00	.05	.11	.17	.21	.24	.27	.29	.31	.33
9	.00	.05	.11	.17	.21	.24	.27	.30	.31	.33
10	.00	.05	.11	.17	.21	.25	.27	.30	.32	.34
11	.00	.05	.11	.17	.21	.25	.28	.30	.32	.34
12	.00	.05	.11	.17	.21	.25	.28	.30	.33	.34
13	.00	.05	.11	.17	.21	.25	.28	.31	.33	.35
14	.00	.05	.11	.17	.22	.25	.28	.31	.33	.35
15	.00	.05	.11	.17	.22	.25	.28	.31	.33	.35
16	.00	.05	.12	.17	.22	.25	.29	.31	.33	.35
17	.00	.05	.12	.17	.22	.26	.29	.31	.34	.36
18	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
19	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
20	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
21	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
22	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
23	.00	.05	.12	.17	.22	.26	.29	.32	.34	.36
24	.00	.05	.12	.17	.22	.26	.29	.32	.34	.37
25	.00	.05	.12	.17	.22	.26	.29	.32	.35	.37
26	.00	.05	.12	.17	.22	.26	.29	.32	.35	.37
27	.00	.05	.12	.17	.22	.26	.29	.32	.35	.37
28	.00	.05	.12	.17	.22	.26	.30	.32	.35	.37
29	.00	.05	.12	.17	.22	.26	.30	.32	.35	.37
30	.00	.05	.12	.17	.22	.26	.30	.32	.35	.37
35	.00	.05	.12	.17	.22	.26	.30	.33	.35	.37
40	.00	.05	.12	.17	.22	.27	.30	.33	.35	.38
50	.00	.05	.12	.18	.22	.27	.30	.33	.36	.38
60	.00	.05	.12	.18	.23	.27	.30	.33	.36	.38
80	.00	.05	.12	.18	.23	.27	.30	.33	.36	.38
100	.00	.05	.12	.18	.23	.27	.31	.34	.36	.39
200	.00	.05	.12	.18	.23	.27	.31	.34	.37	.39
500	.00	.05	.12	.18	.23	.27	.31	.34	.37	.39
1000	.00	.05	.12	.18	.23	.27	.31	.34	.37	.39

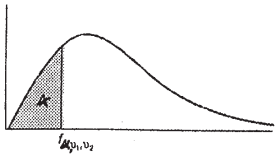
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .05$

υ_2	υ_1									
	11	12	15	20	25	30	40	50	100	1000
1	.21	.21	.22	.23	.24	.24	.24	.25	.25	.26
2	.25	.26	.27	.29	.30	.30	.31	.31	.32	.33
3	.28	.29	.30	.32	.33	.34	.35	.36	.37	.38
4	.30	.31	.33	.35	.36	.37	.38	.39	.41	.42
5	.31	.32	.34	.37	.38	.39	.41	.42	.43	.45
6	.32	.33	.36	.38	.40	.41	.43	.44	.46	.47
7	.33	.34	.37	.40	.42	.43	.44	.45	.48	.50
8	.34	.35	.38	.41	.43	.44	.46	.47	.49	.51
9	.35	.36	.39	.42	.44	.45	.47	.48	.51	.53
10	.35	.36	.39	.43	.45	.46	.48	.49	.52	.54
11	.35	.37	.40	.43	.45	.47	.49	.50	.53	.56
12	.36	.37	.40	.44	.46	.48	.50	.51	.54	.57
13	.36	.38	.41	.44	.47	.48	.51	.52	.55	.58
14	.37	.38	.41	.45	.47	.49	.51	.53	.56	.59
15	.37	.38	.42	.45	.48	.50	.52	.53	.57	.60
16	.37	.38	.42	.46	.48	.50	.53	.54	.57	.60
17	.37	.39	.42	.46	.49	.51	.53	.55	.58	.61
18	.37	.39	.42	.46	.49	.51	.54	.55	.59	.62
19	.38	.39	.43	.47	.49	.51	.54	.56	.59	.63
20	.38	.39	.43	.47	.50	.52	.54	.56	.60	.63
21	.38	.39	.43	.47	.50	.52	.55	.56	.60	.64
22	.38	.40	.43	.48	.50	.52	.55	.57	.61	.64
23	.38	.40	.44	.48	.51	.53	.55	.57	.61	.65
24	.38	.40	.44	.48	.51	.53	.56	.58	.61	.65
25	.38	.40	.44	.48	.51	.53	.56	.58	.62	.66
26	.39	.40	.44	.48	.51	.53	.56	.58	.62	.66
27	.39	.40	.44	.49	.52	.54	.57	.58	.63	.67
28	.39	.40	.44	.49	.52	.54	.57	.59	.63	.67
29	.39	.40	.44	.49	.52	.54	.57	.59	.63	.68
30	.39	.41	.45	.49	.52	.54	.57	.59	.64	.68
35	.39	.41	.45	.50	.53	.55	.58	.60	.65	.70
40	.40	.41	.45	.50	.53	.56	.59	.61	.66	.71
50	.40	.42	.46	.51	.54	.57	.60	.63	.68	.73
60	.40	.42	.46	.51	.55	.57	.61	.63	.69	.75
80	.40	.42	.47	.52	.56	.58	.62	.65	.71	.78
100	.41	.43	.47	.52	.56	.59	.63	.66	.72	.79
200	.41	.43	.48	.53	.57	.60	.64	.67	.75	.84
500	.41	.43	.48	.54	.58	.61	.66	.69	.76	.88
1000	.41	.43	.48	.54	.58	.61	.66	.69	.77	.90

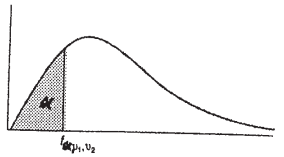
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .10$

υ_2	υ_1									
	1	2	3	4	5	6	7	8	9	10
1	.03	.12	.18	.22	.25	.28	.28	.29	.30	.30
2	.02	.11	.18	.23	.26	.29	.31	.32	.33	.34
3	.02	.11	.19	.24	.28	.30	.33	.34	.36	.37
4	.02	.11	.19	.24	.28	.31	.34	.36	.37	.38
5	.02	.11	.19	.25	.29	.32	.35	.37	.38	.40
6	.02	.11	.19	.25	.29	.33	.35	.37	.39	.41
7	.02	.11	.19	.25	.30	.33	.36	.38	.40	.41
8	.02	.11	.19	.25	.30	.34	.36	.39	.40	.42
9	.02	.11	.19	.25	.30	.34	.37	.39	.41	.43
10	.02	.11	.19	.26	.30	.34	.37	.39	.41	.43
11	.02	.11	.19	.26	.30	.34	.37	.40	.42	.43
12	.02	.11	.19	.26	.31	.34	.37	.40	.42	.44
13	.02	.11	.19	.26	.31	.35	.38	.40	.42	.44
14	.02	.11	.19	.26	.31	.35	.38	.40	.43	.44
15	.02	.11	.19	.26	.31	.35	.38	.41	.43	.45
16	.02	.11	.19	.26	.31	.35	.38	.41	.43	.45
17	.02	.11	.19	.26	.31	.35	.38	.41	.43	.45
18	.02	.11	.19	.26	.31	.35	.38	.41	.43	.45
19	.02	.11	.19	.26	.31	.35	.38	.41	.43	.45
20	.02	.11	.19	.26	.31	.35	.39	.41	.44	.45
21	.02	.11	.19	.26	.31	.35	.39	.41	.44	.46
22	.02	.11	.19	.26	.31	.35	.39	.41	.44	.46
23	.02	.11	.19	.26	.31	.35	.39	.42	.44	.46
24	.02	.11	.19	.26	.31	.35	.39	.42	.44	.46
25	.02	.11	.19	.26	.31	.36	.39	.42	.44	.46
26	.02	.11	.19	.26	.31	.36	.39	.42	.44	.46
27	.02	.11	.19	.26	.31	.36	.39	.42	.44	.46
28	.02	.11	.19	.26	.31	.36	.39	.42	.44	.46
29	.02	.11	.19	.26	.31	.36	.39	.42	.44	.46
30	.02	.11	.19	.26	.32	.36	.39	.42	.44	.46
35	.02	.11	.19	.26	.32	.36	.39	.42	.45	.47
40	.02	.11	.19	.26	.32	.36	.39	.42	.45	.47
50	.02	.11	.19	.26	.32	.36	.40	.43	.45	.47
60	.02	.11	.19	.26	.32	.36	.40	.43	.45	.47
80	.02	.11	.19	.26	.32	.36	.40	.43	.46	.48
100	.02	.11	.19	.26	.32	.36	.40	.43	.46	.48
200	.02	.11	.19	.27	.32	.37	.40	.43	.46	.48
500	.02	.11	.19	.27	.32	.37	.40	.44	.46	.48
1000	.02	.11	.19	.27	.32	.37	.40	.44	.46	.49

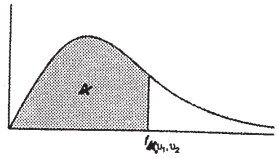
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .10$

υ_2	υ_1									
	11	12	15	20	25	30	40	50	100	1000
1	.31	.31	.33	.34	.34	.35	.35	.36	.36	.37
2	.35	.36	.37	.39	.40	.40	.41	.41	.42	.43
3	.38	.38	.40	.42	.43	.44	.45	.46	.47	.48
4	.39	.40	.42	.44	.46	.47	.48	.49	.50	.51
5	.41	.42	.44	.46	.48	.49	.50	.51	.52	.54
6	.42	.43	.45	.48	.49	.50	.52	.53	.55	.56
7	.43	.44	.46	.49	.51	.52	.53	.54	.56	.58
8	.43	.45	.47	.50	.52	.53	.55	.56	.58	.60
9	.44	.45	.48	.51	.53	.54	.56	.57	.59	.61
10	.44	.46	.49	.52	.54	.55	.57	.58	.60	.62
11	.45	.46	.49	.52	.54	.56	.58	.59	.61	.63
12	.45	.47	.50	.53	.55	.56	.58	.60	.62	.64
13	.46	.47	.50	.53	.56	.57	.59	.60	.63	.65
14	.46	.47	.50	.54	.56	.58	.60	.61	.64	.66
15	.46	.48	.51	.54	.56	.58	.60	.61	.64	.67
16	.46	.48	.51	.55	.57	.59	.61	.62	.65	.68
17	.47	.48	.51	.55	.57	.59	.61	.62	.65	.68
18	.47	.48	.52	.55	.58	.59	.62	.63	.66	.69
19	.47	.48	.52	.55	.58	.60	.62	.63	.66	.69
20	.47	.49	.52	.56	.58	.60	.62	.64	.67	.70
21	.47	.49	.52	.56	.58	.60	.63	.64	.67	.71
22	.47	.49	.52	.56	.59	.61	.63	.64	.68	.71
23	.48	.49	.53	.56	.59	.61	.63	.65	.68	.71
24	.48	.49	.53	.57	.59	.61	.64	.65	.68	.72
25	.48	.49	.53	.57	.59	.61	.64	.65	.69	.72
26	.48	.49	.53	.57	.60	.62	.64	.66	.69	.73
27	.48	.49	.53	.57	.60	.62	.64	.66	.69	.73
28	.48	.50	.53	.57	.60	.62	.64	.66	.70	.73
29	.48	.50	.53	.57	.60	.62	.65	.66	.70	.74
30	.48	.50	.53	.58	.60	.62	.65	.67	.70	.74
35	.48	.50	.54	.58	.61	.63	.66	.68	.71	.75
40	.49	.50	.54	.59	.61	.64	.66	.68	.72	.77
50	.49	.51	.55	.59	.62	.64	.67	.69	.74	.79
60	.49	.51	.55	.60	.63	.65	.68	.70	.75	.80
80	.50	.51	.55	.60	.63	.66	.69	.71	.76	.82
100	.50	.52	.56	.61	.64	.66	.70	.72	.77	.84
200	.50	.52	.56	.61	.65	.67	.71	.74	.80	.87
500	.51	.52	.57	.62	.65	.68	.72	.75	.81	.91
1000	.51	.52	.57	.62	.66	.68	.72	.75	.82	.92

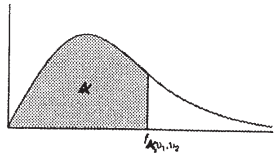
تابع للجدول (04) : قيم توزيع فيشر F



$\alpha = .90$

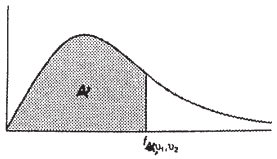
υ_2 \ υ_1	1	2	3	4	5	6	7	8	9	10
1	39.86	49.50	53.59	55.83	57.24	58.20	58.91	59.44	59.86	60.19
2	8.53	9.00	9.16	9.24	9.29	9.33	9.35	9.37	9.38	9.39
3	5.54	5.46	5.39	5.34	5.31	5.28	5.27	5.25	5.24	5.23
4	4.54	4.32	4.19	4.11	4.05	4.01	3.98	3.95	3.94	3.92
5	4.06	3.78	3.62	3.52	3.45	3.40	3.37	3.34	3.32	3.30
6	3.78	3.46	3.29	3.18	3.11	3.05	3.01	2.98	2.96	2.94
7	3.59	3.26	3.07	2.96	2.88	2.83	2.79	2.75	2.72	2.70
8	3.46	3.11	2.92	2.81	2.73	2.67	2.62	2.59	2.56	2.54
9	3.36	3.01	2.81	2.69	2.61	2.55	2.51	2.47	2.44	2.42
10	3.29	2.92	2.73	2.61	2.52	2.46	2.41	2.38	2.35	2.32
11	3.23	2.86	2.66	2.54	2.45	2.39	2.34	2.30	2.27	2.25
12	3.18	2.81	2.61	2.48	2.39	2.33	2.28	2.24	2.21	2.19
13	3.14	2.76	2.56	2.43	2.35	2.28	2.23	2.20	2.16	2.14
14	3.10	2.73	2.52	2.39	2.31	2.24	2.19	2.15	2.12	2.10
15	3.07	2.70	2.49	2.36	2.27	2.21	2.16	2.12	2.09	2.06
16	3.05	2.67	2.46	2.33	2.24	2.18	2.13	2.09	2.06	2.03
17	3.03	2.64	2.44	2.31	2.22	2.15	2.10	2.06	2.03	2.00
18	3.01	2.62	2.42	2.29	2.20	2.13	2.08	2.04	2.00	1.98
19	2.99	2.61	2.40	2.27	2.18	2.11	2.06	2.02	1.98	1.96
20	2.97	2.59	2.38	2.25	2.16	2.09	2.04	2.00	1.96	1.94
21	2.96	2.57	2.36	2.23	2.14	2.08	2.02	1.98	1.95	1.92
22	2.95	2.56	2.35	2.22	2.13	2.06	2.01	1.97	1.93	1.90
23	2.94	2.55	2.34	2.21	2.11	2.05	1.99	1.95	1.92	1.89
24	2.93	2.54	2.33	2.19	2.10	2.04	1.98	1.94	1.91	1.88
25	2.92	2.53	2.32	2.18	2.09	2.02	1.97	1.93	1.89	1.87
26	2.91	2.52	2.31	2.17	2.08	2.01	1.96	1.92	1.88	1.86
27	2.90	2.51	2.30	2.17	2.07	2.00	1.95	1.91	1.87	1.85
28	2.89	2.50	2.29	2.16	2.06	2.00	1.94	1.90	1.87	1.84
29	2.89	2.50	2.28	2.15	2.06	1.99	1.93	1.89	1.86	1.83
30	2.88	2.49	2.28	2.14	2.05	1.98	1.93	1.88	1.85	1.82
35	2.85	2.46	2.25	2.11	2.02	1.95	1.90	1.85	1.82	1.79
40	2.84	2.44	2.23	2.09	2.00	1.93	1.87	1.83	1.79	1.76
50	2.81	2.41	2.20	2.06	1.97	1.90	1.84	1.80	1.76	1.73
60	2.79	2.39	2.18	2.04	1.95	1.87	1.82	1.77	1.74	1.71
80	2.77	2.37	2.15	2.02	1.92	1.85	1.79	1.75	1.71	1.68
100	2.76	2.36	2.14	2.00	1.91	1.83	1.78	1.73	1.69	1.66
200	2.73	2.33	2.11	1.97	1.88	1.80	1.75	1.70	1.66	1.63
500	2.72	2.31	2.09	1.96	1.86	1.79	1.73	1.68	1.64	1.61
1000	2.71	2.31	2.09	1.95	1.85	1.78	1.72	1.68	1.64	1.61

تابع للجدول (04) : قيم توزيع فيشر F



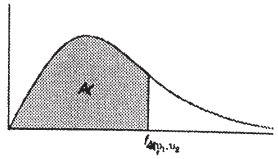
$\alpha = .90$

υ_2 \ υ_1	11	12	15	20	25	30	40	50	100	1000
1	60.47	60.71	61.22	61.74	62.06	62.26	62.53	62.69	63.00	63.29
2	9.40	9.41	9.42	9.44	9.45	9.46	9.47	9.47	9.48	9.49
3	5.22	5.22	5.20	5.19	5.17	5.17	5.16	5.15	5.14	5.13
4	3.91	3.90	3.87	3.84	3.83	3.82	3.80	3.80	3.78	3.76
5	3.28	3.27	3.24	3.21	3.19	3.17	3.16	3.15	3.13	3.11
6	2.92	2.90	2.87	2.84	2.81	2.80	2.78	2.77	2.75	2.72
7	2.68	2.67	2.63	2.59	2.57	2.56	2.54	2.52	2.50	2.47
8	2.52	2.50	2.46	2.42	2.40	2.38	2.36	2.35	2.32	2.30
9	2.40	2.38	2.34	2.30	2.27	2.25	2.23	2.22	2.19	2.16
10	2.30	2.28	2.24	2.20	2.17	2.16	2.13	2.12	2.09	2.06
11	2.23	2.21	2.17	2.12	2.10	2.08	2.05	2.04	2.00	1.98
12	2.17	2.15	2.10	2.06	2.03	2.01	1.99	1.97	1.94	1.91
13	2.12	2.10	2.05	2.01	1.98	1.96	1.93	1.92	1.88	1.85
14	2.07	2.05	2.01	1.96	1.93	1.91	1.89	1.87	1.83	1.80
15	2.04	2.02	1.97	1.92	1.89	1.87	1.85	1.83	1.79	1.76
16	2.01	1.99	1.94	1.89	1.86	1.84	1.81	1.79	1.76	1.72
17	1.98	1.96	1.91	1.86	1.83	1.81	1.78	1.76	1.73	1.69
18	1.95	1.93	1.89	1.84	1.80	1.78	1.75	1.74	1.70	1.66
19	1.93	1.91	1.86	1.81	1.78	1.76	1.73	1.71	1.67	1.64
20	1.91	1.89	1.84	1.79	1.76	1.74	1.71	1.69	1.65	1.61
21	1.90	1.87	1.83	1.78	1.74	1.72	1.69	1.67	1.63	1.59
22	1.88	1.86	1.81	1.76	1.73	1.70	1.67	1.65	1.61	1.57
23	1.87	1.84	1.80	1.74	1.71	1.69	1.66	1.64	1.59	1.55
24	1.85	1.83	1.78	1.73	1.70	1.67	1.64	1.62	1.58	1.54
25	1.84	1.82	1.77	1.72	1.68	1.66	1.63	1.61	1.56	1.52
26	1.83	1.81	1.76	1.71	1.67	1.65	1.61	1.59	1.55	1.51
27	1.82	1.80	1.75	1.70	1.66	1.64	1.60	1.58	1.54	1.50
28	1.81	1.79	1.74	1.69	1.65	1.63	1.59	1.57	1.53	1.48
29	1.80	1.78	1.73	1.68	1.64	1.62	1.58	1.56	1.52	1.47
30	1.79	1.77	1.72	1.67	1.63	1.61	1.57	1.55	1.51	1.46
35	1.76	1.74	1.69	1.63	1.60	1.57	1.53	1.51	1.47	1.42
40	1.74	1.71	1.66	1.61	1.57	1.54	1.51	1.48	1.43	1.38
50	1.70	1.68	1.63	1.57	1.53	1.50	1.46	1.44	1.39	1.33
60	1.68	1.66	1.60	1.54	1.50	1.48	1.44	1.41	1.36	1.30
80	1.65	1.63	1.57	1.51	1.47	1.44	1.40	1.38	1.32	1.25
100	1.64	1.61	1.56	1.49	1.45	1.42	1.38	1.35	1.29	1.22
200	1.60	1.58	1.52	1.46	1.41	1.38	1.34	1.31	1.24	1.16
500	1.58	1.56	1.50	1.44	1.39	1.36	1.31	1.28	1.21	1.11
1000	1.58	1.55	1.49	1.43	1.38	1.35	1.30	1.27	1.20	1.08



تابع للجدول (04) : قيم توزيع فيشر F

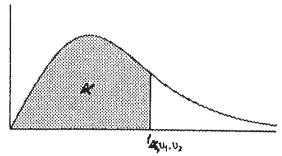
υ_2	$\alpha = .95$									
	υ_1									
	1	2	3	4	5	6	7	8	9	10
1	161.45	199.50	215.71	224.58	230.16	233.99	236.77	238.88	240.54	241.88
2	18.51	19.00	19.16	19.25	19.30	19.33	19.35	19.37	19.38	19.40
3	10.13	9.55	9.28	9.12	9.01	8.94	8.89	8.85	8.81	8.79
4	7.71	6.94	6.59	6.39	6.26	6.16	6.09	6.04	6.00	5.97
5	6.61	5.79	5.41	5.19	5.05	4.95	4.88	4.82	4.77	4.73
6	5.99	5.14	4.76	4.53	4.39	4.28	4.21	4.15	4.10	4.06
7	5.59	4.74	4.35	4.12	3.97	3.87	3.79	3.73	3.68	3.64
8	5.32	4.46	4.07	3.84	3.69	3.58	3.50	3.44	3.39	3.35
9	5.12	4.26	3.86	3.63	3.48	3.37	3.29	3.23	3.18	3.14
10	4.96	4.10	3.71	3.48	3.33	3.22	3.14	3.07	3.02	2.98
11	4.84	3.98	3.59	3.36	3.20	3.09	3.01	2.95	2.90	2.85
12	4.75	3.89	3.49	3.26	3.11	3.00	2.91	2.85	2.80	2.75
13	4.67	3.81	3.41	3.18	3.03	2.92	2.83	2.77	2.71	2.67
14	4.60	3.74	3.34	3.11	2.96	2.85	2.76	2.70	2.65	2.60
15	4.54	3.68	3.29	3.06	2.90	2.79	2.71	2.64	2.59	2.54
16	4.49	3.63	3.24	3.01	2.85	2.74	2.66	2.59	2.54	2.49
17	4.45	3.59	3.20	2.96	2.81	2.70	2.61	2.55	2.49	2.45
18	4.41	3.55	3.16	2.93	2.77	2.66	2.58	2.51	2.46	2.41
19	4.38	3.52	3.13	2.90	2.74	2.63	2.54	2.48	2.42	2.38
20	4.35	3.49	3.10	2.87	2.71	2.60	2.51	2.45	2.39	2.35
21	4.32	3.47	3.07	2.84	2.68	2.57	2.49	2.42	2.37	2.32
22	4.30	3.44	3.05	2.82	2.66	2.55	2.46	2.40	2.34	2.30
23	4.28	3.42	3.03	2.80	2.64	2.53	2.44	2.37	2.32	2.27
24	4.26	3.40	3.01	2.78	2.62	2.51	2.42	2.36	2.30	2.25
25	4.24	3.39	2.99	2.76	2.60	2.49	2.40	2.34	2.28	2.24
26	4.23	3.37	2.98	2.74	2.59	2.47	2.39	2.32	2.27	2.22
27	4.21	3.35	2.96	2.73	2.57	2.46	2.37	2.31	2.25	2.20
28	4.20	3.34	2.95	2.71	2.56	2.45	2.36	2.29	2.24	2.19
29	4.18	3.33	2.93	2.70	2.55	2.43	2.35	2.28	2.22	2.18
30	4.17	3.32	2.92	2.69	2.53	2.42	2.33	2.27	2.21	2.16
35	4.12	3.27	2.87	2.64	2.49	2.37	2.29	2.22	2.16	2.11
40	4.08	3.23	2.84	2.61	2.45	2.34	2.25	2.18	2.12	2.08
50	4.03	3.18	2.79	2.56	2.40	2.29	2.20	2.13	2.07	2.03
60	4.00	3.15	2.76	2.53	2.37	2.25	2.17	2.10	2.04	1.99
80	3.96	3.11	2.72	2.49	2.33	2.21	2.13	2.06	2.00	1.95
100	3.94	3.09	2.70	2.46	2.31	2.19	2.10	2.03	1.97	1.93
200	3.89	3.04	2.65	2.42	2.26	2.14	2.06	1.98	1.93	1.88
500	3.86	3.01	2.62	2.39	2.23	2.12	2.03	1.96	1.90	1.85
1000	3.85	3.01	2.61	2.38	2.22	2.11	2.02	1.95	1.89	1.84



تابع للجدول (04) : قيم توزيع فيشر F

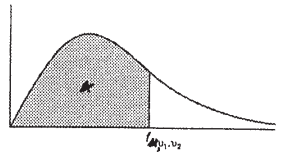
υ_2	$\alpha = .95$									
	υ_1									
	11	12	15	20	25	30	40	50	100	1000
1	242.98	243.91	245.96	248.01	249.26	250.08	251.15	251.77	253.01	254.17
2	19.40	19.41	19.43	19.45	19.46	19.46	19.47	19.48	19.49	19.50
3	8.76	8.74	8.70	8.66	8.63	8.62	8.59	8.58	8.55	8.53
4	5.94	5.91	5.86	5.80	5.77	5.74	5.72	5.70	5.66	5.63
5	4.70	4.68	4.62	4.56	4.52	4.50	4.46	4.44	4.41	4.37
6	4.03	4.00	3.94	3.87	3.84	3.81	3.77	3.75	3.71	3.67
7	3.60	3.57	3.51	3.44	3.40	3.38	3.34	3.32	3.27	3.23
8	3.31	3.28	3.22	3.15	3.11	3.08	3.04	3.02	2.97	2.93
9	3.10	3.07	3.01	2.94	2.89	2.86	2.83	2.80	2.76	2.71
10	2.94	2.91	2.85	2.77	2.73	2.70	2.66	2.64	2.59	2.54
11	2.82	2.79	2.72	2.65	2.60	2.57	2.53	2.51	2.46	2.41
12	2.72	2.69	2.62	2.54	2.50	2.47	2.43	2.40	2.35	2.30
13	2.63	2.60	2.53	2.46	2.41	2.38	2.34	2.31	2.26	2.21
14	2.57	2.53	2.46	2.39	2.34	2.31	2.27	2.24	2.19	2.14
15	2.51	2.48	2.40	2.33	2.28	2.25	2.20	2.18	2.12	2.07
16	2.46	2.42	2.35	2.28	2.23	2.19	2.15	2.12	2.07	2.02
17	2.41	2.38	2.31	2.23	2.18	2.15	2.10	2.08	2.02	1.97
18	2.37	2.34	2.27	2.19	2.14	2.11	2.06	2.04	1.98	1.92
19	2.34	2.31	2.23	2.16	2.11	2.07	2.03	2.00	1.94	1.88
20	2.31	2.28	2.20	2.12	2.07	2.04	1.99	1.97	1.91	1.85
21	2.28	2.25	2.18	2.10	2.05	2.01	1.96	1.94	1.88	1.82
22	2.26	2.23	2.15	2.07	2.02	1.98	1.94	1.91	1.85	1.79
23	2.24	2.20	2.13	2.05	2.00	1.96	1.91	1.88	1.82	1.76
24	2.22	2.18	2.11	2.03	1.97	1.94	1.89	1.86	1.80	1.74
25	2.20	2.16	2.09	2.01	1.96	1.92	1.87	1.84	1.78	1.72
26	2.18	2.15	2.07	1.99	1.94	1.90	1.85	1.82	1.76	1.70
27	2.17	2.13	2.06	1.97	1.92	1.88	1.84	1.81	1.74	1.68
28	2.15	2.12	2.04	1.96	1.91	1.87	1.82	1.79	1.73	1.66
29	2.14	2.10	2.03	1.94	1.89	1.85	1.81	1.77	1.71	1.65
30	2.13	2.09	2.01	1.93	1.88	1.84	1.79	1.76	1.70	1.63
35	2.07	2.04	1.96	1.88	1.82	1.79	1.74	1.70	1.63	1.57
40	2.04	2.00	1.92	1.84	1.78	1.74	1.69	1.66	1.59	1.52
50	1.99	1.95	1.87	1.78	1.73	1.69	1.63	1.60	1.52	1.45
60	1.95	1.92	1.84	1.75	1.69	1.65	1.59	1.56	1.48	1.40
80	1.91	1.88	1.79	1.70	1.64	1.60	1.54	1.51	1.43	1.34
100	1.89	1.85	1.77	1.68	1.62	1.57	1.52	1.48	1.39	1.30
200	1.84	1.80	1.72	1.62	1.56	1.52	1.46	1.41	1.32	1.21
500	1.81	1.77	1.69	1.59	1.53	1.48	1.42	1.38	1.28	1.14
1000	1.80	1.76	1.68	1.58	1.52	1.47	1.41	1.36	1.26	1.11

تابع للجدول (04) : قيم توزيع فيشر F



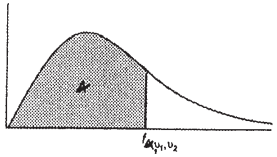
$\alpha = .975$										
	υ_1									
υ_2	1	2	3	4	5	6	7	8	9	10
2	38.51	39.00	39.17	39.25	39.30	39.33	39.36	39.37	39.39	39.40
3	17.44	16.04	15.44	15.10	14.88	14.74	14.63	14.54	14.47	14.42
4	12.22	10.65	9.98	9.61	9.36	9.20	9.07	8.98	8.90	8.85
5	10.01	8.43	7.76	7.39	7.15	6.98	6.85	6.76	6.68	6.62
6	8.81	7.26	6.60	6.23	5.99	5.82	5.70	5.60	5.52	5.46
7	8.07	6.54	5.89	5.52	5.29	5.12	5.00	4.90	4.82	4.76
8	7.57	6.06	5.42	5.05	4.82	4.65	4.53	4.43	4.36	4.30
9	7.21	5.71	5.08	4.72	4.48	4.32	4.20	4.10	4.03	3.96
10	6.94	5.46	4.83	4.47	4.24	4.07	3.95	3.85	3.78	3.72
11	6.72	5.26	4.63	4.28	4.04	3.88	3.76	3.66	3.59	3.53
12	6.55	5.10	4.47	4.12	3.89	3.73	3.61	3.51	3.44	3.37
13	6.41	4.97	4.35	4.00	3.77	3.60	3.48	3.39	3.31	3.25
14	6.30	4.86	4.24	3.89	3.66	3.50	3.38	3.29	3.21	3.15
15	6.20	4.77	4.15	3.80	3.58	3.41	3.29	3.20	3.12	3.06
16	6.12	4.69	4.08	3.73	3.50	3.34	3.22	3.12	3.05	2.99
17	6.04	4.62	4.01	3.66	3.44	3.28	3.16	3.06	2.98	2.92
18	5.98	4.56	3.95	3.61	3.38	3.22	3.10	3.01	2.93	2.87
19	5.92	4.51	3.90	3.56	3.33	3.17	3.05	2.96	2.88	2.82
20	5.87	4.46	3.86	3.51	3.29	3.13	3.01	2.91	2.84	2.77
21	5.83	4.42	3.82	3.48	3.25	3.09	2.97	2.87	2.80	2.73
22	5.79	4.38	3.78	3.44	3.22	3.05	2.93	2.84	2.76	2.70
23	5.75	4.35	3.75	3.41	3.18	3.02	2.90	2.81	2.73	2.67
24	5.72	4.32	3.72	3.38	3.15	2.99	2.87	2.78	2.70	2.64
25	5.69	4.29	3.69	3.35	3.13	2.97	2.85	2.75	2.68	2.61
26	5.66	4.27	3.67	3.33	3.10	2.94	2.82	2.73	2.65	2.59
27	5.63	4.24	3.65	3.31	3.08	2.92	2.80	2.71	2.63	2.57
28	5.61	4.22	3.63	3.29	3.06	2.90	2.78	2.69	2.61	2.55
29	5.59	4.20	3.61	3.27	3.04	2.88	2.76	2.67	2.59	2.53
30	5.57	4.18	3.59	3.25	3.03	2.87	2.75	2.65	2.57	2.51
35	5.48	4.11	3.52	3.18	2.96	2.80	2.68	2.58	2.50	2.44
40	5.42	4.05	3.46	3.13	2.90	2.74	2.62	2.53	2.45	2.39
50	5.34	3.97	3.39	3.05	2.83	2.67	2.55	2.46	2.38	2.32
60	5.29	3.93	3.34	3.01	2.79	2.63	2.51	2.41	2.33	2.27
80	5.22	3.86	3.28	2.95	2.73	2.57	2.45	2.35	2.28	2.21
100	5.18	3.83	3.25	2.92	2.70	2.54	2.42	2.32	2.24	2.18
200	5.10	3.76	3.18	2.85	2.63	2.47	2.35	2.26	2.18	2.11
500	5.05	3.72	3.14	2.81	2.59	2.43	2.31	2.22	2.14	2.07
1000	5.04	3.70	3.13	2.80	2.58	2.42	2.30	2.20	2.13	2.06

تابع للجدول (04) : قيم توزيع فيشر F



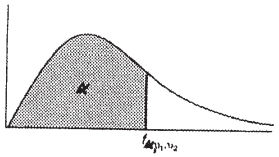
$\alpha = .975$										
	υ_1									
υ_2	11	12	15	20	25	30	40	50	100	1000
2	39.41	39.41	39.43	39.45	39.46	39.46	39.47	39.48	39.49	39.50
3	14.37	14.33	14.26	14.17	14.11	14.08	14.04	14.01	13.96	13.91
4	8.79	8.75	8.66	8.56	8.50	8.46	8.41	8.38	8.32	8.26
5	6.57	6.53	6.43	6.33	6.27	6.23	6.17	6.14	6.08	6.02
6	5.41	5.37	5.27	5.17	5.11	5.06	5.01	4.98	4.92	4.86
7	4.71	4.67	4.57	4.47	4.40	4.36	4.31	4.28	4.21	4.15
8	4.24	4.20	4.10	4.00	3.94	3.89	3.84	3.81	3.74	3.68
9	3.91	3.87	3.77	3.67	3.60	3.56	3.51	3.47	3.40	3.34
10	3.66	3.62	3.52	3.42	3.35	3.31	3.26	3.22	3.15	3.09
11	3.47	3.43	3.33	3.23	3.16	3.12	3.06	3.03	2.96	2.89
12	3.32	3.28	3.18	3.07	3.01	2.96	2.91	2.87	2.80	2.73
13	3.20	3.15	3.05	2.95	2.88	2.84	2.78	2.74	2.67	2.60
14	3.09	3.05	2.95	2.84	2.78	2.73	2.67	2.64	2.56	2.50
15	3.01	2.96	2.86	2.76	2.69	2.64	2.59	2.55	2.47	2.40
16	2.93	2.89	2.79	2.68	2.61	2.57	2.51	2.47	2.40	2.32
17	2.87	2.82	2.72	2.62	2.55	2.50	2.44	2.41	2.33	2.26
18	2.81	2.77	2.67	2.56	2.49	2.44	2.38	2.35	2.27	2.20
19	2.76	2.72	2.62	2.51	2.44	2.39	2.33	2.30	2.22	2.14
20	2.72	2.68	2.57	2.46	2.40	2.35	2.29	2.25	2.17	2.09
21	2.68	2.64	2.53	2.42	2.36	2.31	2.25	2.21	2.13	2.05
22	2.65	2.60	2.50	2.39	2.32	2.27	2.21	2.17	2.09	2.01
23	2.62	2.57	2.47	2.36	2.29	224	2.18	2.14	2.06	1.98
24	2.59	2.54	2.44	2.33	2.26	2.21	2.15	2.11	2.02	1.94
25	2.56	2.51	2.41	2.30	2.23	2.18	2.12	2.08	2.00	1.91
26	2.54	2.49	2.39	2.28	2.21	2.16	2.09	2.05	1.97	1.89
27	2.51	2.47	2.36	2.25	2.18	2.13	2.07	2.03	1.94	1.86
28	2.49	2.45	2.34	2.23	2.16	2.11	2.05	2.01	1.92	1.84
29	2.48	2.43	2.32	2.21	2.14	2.09	2.03	1.99	1.90	1.82
30	2.46	2.41	2.31	2.20	2.12	2.07	2.01	1.97	1.88	1.80
35	2.39	2.34	2.23	2.12	2.05	2.00	1.93	1.89	1.80	1.71
40	2.33	2.29	2.18	2.07	1.99	1.94	1.88	1.83	1.74	1.65
50	2.26	2.22	2.11	1.99	1.92	1.87	1.80	1.75	1.66	1.56
60	2.22	2.17	2.06	1.94	1.87	1.82	1.74	1.70	1.60	1.50
80	2.16	2.11	2.00	1.88	1.81	1.75	1.68	1.63	1.53	1.41
100	2.12	2.08	1.97	1.85	1.77	1.71	1.64	1.59	1.48	1.36
200	2.06	2.01	1.90	1.78	1.70	1.64	1.56	1.51	1.39	1.25
500	2.02	1.97	1.86	1.74	1.65	1.60	1.52	1.46	1.34	1.17
1000	2.01	1.96	1.85	1.72	1.64	1.58	1.50	1.45	1.32	1.13

تابع للجدول (04) : قيم توزيع فيشر F



υ_2	$\alpha = .99$									
	υ_1									
	1	2	3	4	5	6	7	8	9	10
2	98.50	99.00	99.17	99.25	99.30	99.33	99.36	99.37	99.39	99.40
3	34.12	30.82	29.46	28.71	28.24	27.91	27.67	27.50	27.34	27.22
4	21.20	18.00	16.69	15.98	15.52	15.21	14.98	14.80	14.66	14.55
5	16.26	13.27	12.06	11.39	10.97	10.67	10.46	10.29	10.16	10.05
6	13.75	10.92	9.78	9.15	8.75	8.47	8.26	8.10	7.98	7.87
7	12.25	9.55	8.45	7.85	7.46	7.19	6.99	6.84	6.72	6.62
8	11.26	8.65	7.59	7.01	6.63	6.37	6.18	6.03	5.91	5.81
9	10.56	8.02	6.99	6.42	6.06	5.80	5.61	5.47	5.35	5.26
10	10.04	7.56	6.55	5.99	5.64	5.69	5.20	5.06	4.94	4.85
11	9.65	7.21	6.22	5.67	5.32	5.07	4.89	4.74	4.63	4.54
12	9.33	6.93	5.95	5.41	5.06	4.82	4.64	4.50	4.39	4.30
13	9.07	6.70	5.74	5.21	4.86	4.62	4.44	4.30	4.19	4.10
14	8.86	6.51	5.56	5.04	4.69	4.46	4.28	4.14	4.03	3.94
15	8.68	6.36	5.42	4.89	4.56	4.32	4.14	4.00	3.89	3.80
16	8.53	6.23	5.29	4.77	4.44	4.20	4.03	3.89	3.78	3.69
17	8.40	6.11	5.18	4.67	4.34	4.10	3.93	3.79	3.68	3.59
18	8.29	6.01	5.09	4.58	4.25	4.01	3.84	3.71	3.60	3.51
19	8.18	5.93	5.01	4.50	4.17	3.94	3.77	3.63	3.52	3.43
20	8.10	5.85	4.94	4.43	4.10	3.87	3.70	3.56	3.46	3.37
21	8.02	5.78	4.87	4.37	4.04	3.81	3.64	3.51	3.40	3.31
22	7.95	5.72	4.82	4.31	3.99	3.76	3.59	3.45	3.35	3.26
23	7.88	5.66	4.76	4.26	3.94	3.71	3.54	3.41	3.30	3.21
24	7.82	5.61	4.72	4.22	3.90	3.67	3.50	3.36	3.26	3.17
25	7.77	5.57	4.68	4.18	3.85	3.63	3.46	3.32	3.22	3.13
26	7.72	5.53	4.64	4.14	3.82	3.59	3.42	3.29	3.18	3.09
27	7.68	5.49	4.60	4.11	3.78	3.56	3.39	3.26	3.15	3.06
28	7.64	5.45	4.57	4.07	3.75	3.53	3.36	3.23	3.12	3.03
29	7.60	5.42	4.54	4.04	3.73	3.50	3.33	3.20	3.09	3.00
30	7.56	5.39	4.51	4.02	3.70	3.47	3.30	3.17	3.07	2.98
35	7.42	5.27	4.40	3.91	3.59	3.37	3.20	3.07	2.96	2.88
40	7.31	5.18	4.31	3.83	3.51	3.29	3.12	2.99	2.89	2.80
50	7.17	5.06	4.20	3.72	3.41	3.19	3.02	2.89	2.78	2.70
60	7.08	4.98	4.13	3.65	3.34	3.12	2.95	2.82	2.72	2.63
80	6.96	4.88	4.04	3.56	3.26	3.04	2.87	2.74	2.64	2.55
100	6.90	4.82	3.98	3.51	3.21	2.99	2.82	2.69	2.59	2.50
200	6.76	4.71	3.88	3.41	3.11	2.89	2.73	2.60	2.50	2.41
500	6.69	4.65	3.82	3.36	3.05	2.84	2.68	2.55	2.44	2.36
1000	6.66	4.63	3.80	3.34	3.04	2.82	2.66	2.53	2.43	2.34

تابع للجدول (04) : قيم توزيع فيشر F



υ_2	$\alpha = .99$									
	υ_1									
	11	12	15	20	25	30	40	50	100	1000
2	99.41	99.42	99.43	99.45	99.46	99.46	99.47	99.48	99.49	99.51
3	27.12	27.03	26.85	26.67	26.58	26.50	26.41	26.35	26.24	26.14
4	14.45	14.37	14.19	14.02	13.91	13.84	13.75	13.69	13.58	13.48
5	9.96	9.89	9.72	9.55	9.45	9.38	9.30	9.24	9.13	9.03
6	7.79	7.72	7.56	7.40	7.29	7.23	7.15	7.09	6.99	6.89
7	6.54	6.47	6.31	6.16	6.06	5.99	5.91	5.86	5.75	5.66
8	5.73	5.67	5.52	5.36	5.26	5.20	5.12	5.07	4.96	4.87
9	5.18	5.11	4.96	4.81	4.71	4.65	4.57	4.52	4.41	4.32
10	4.77	4.71	4.56	4.41	4.31	4.25	4.17	4.12	4.01	3.92
11	4.46	4.40	4.25	4.10	4.00	3.94	3.86	3.81	3.71	3.61
12	4.22	4.16	4.01	3.86	3.76	3.70	3.62	3.57	3.47	3.37
13	4.02	3.96	3.82	3.66	3.57	3.51	3.43	3.38	3.27	3.18
14	3.86	3.80	3.66	3.51	3.41	3.35	3.27	3.22	3.11	3.02
15	3.73	3.67	3.52	3.37	3.28	3.21	3.13	3.08	2.98	2.88
16	3.62	3.55	3.41	3.26	3.16	3.10	3.02	2.97	2.86	2.76
17	3.52	3.46	3.31	3.16	3.07	3.00	2.92	2.87	2.76	2.66
18	3.43	3.37	3.23	3.08	2.98	2.92	2.84	2.78	2.68	2.58
19	3.36	3.30	3.15	3.00	2.91	2.84	2.76	2.71	2.60	2.50
20	3.29	3.23	3.09	2.94	2.84	2.78	2.69	2.64	2.54	2.43
21	3.24	3.17	3.03	2.88	2.78	2.72	2.64	2.58	2.48	2.37
22	3.18	3.12	2.98	2.83	2.73	2.67	2.58	2.53	2.42	2.32
23	3.14	3.07	2.93	2.78	2.69	2.62	2.54	2.48	2.37	2.27
24	3.09	3.03	2.89	2.74	2.64	2.58	2.49	2.44	2.33	2.22
25	3.06	2.99	2.85	2.70	2.60	25.54	2.45	2.40	2.29	2.18
26	3.02	2.96	2.81	2.66	2.57	2.50	2.42	2.36	2.25	2.14
27	2.99	2.93	2.78	2.63	2.54	2.47	2.38	2.33	2.22	2.11
28	2.96	2.90	2.75	2.60	2.51	2.44	2.35	2.30	2.19	2.08
29	2.93	2.87	2.73	2.57	2.48	2.41	2.33	2.27	2.16	2.05
30	2.91	2.84	2.70	2.55	2.45	2.39	2.30	2.24	2.13	2.02
35	2.80	2.74	2.60	2.44	2.35	2.28	2.19	2.14	2.02	1.90
40	2.73	2.66	2.52	2.37	2.27	2.20	2.11	2.06	1.94	1.82
50	2.62	2.56	2.42	2.27	2.17	2.10	2.01	1.95	1.82	1.70
60	2.56	2.50	2.35	2.20	2.10	2.03	1.94	1.88	1.75	1.62
80	2.48	2.42	2.27	2.12	2.01	1.94	1.85	1.79	1.65	1.51
100	2.43	2.37	2.22	2.07	1.97	1.89	1.80	1.74	1.60	1.45
200	2.34	2.27	2.13	1.97	1.87	1.79	1.69	1.63	1.48	1.30
500	2.28	2.22	2.07	1.92	1.81	1.74	1.63	1.57	1.41	1.20
1000	2.27	2.20	2.06	1.90	1.79	1.72	1.61	1.54	1.38	1.16