

Medical Knowledge Self-Assessment Program®

**Performance Interpretation  
Guidelines with Norm Tables**

**MKSAP® 16**

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## **MKSAP 16**

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Credit is available from July 31, 2012, to July 31, 2015, for the Part A books, and from December 31, 2012, to December 31, 2015 for the Part B books.

### ***Learning Objectives***

The learning objectives of the Medical Knowledge Self-Assessment Program are to:

- Close gaps between actual care in your practice and preferred standards of care, based on best evidence
- Diagnose disease states that are less common and sometimes overlooked and confusing
- Improve management of comorbid conditions that can complicate patient care
- Determine when to refer patients for surgery or care by subspecialists
- Pass the ABIM certification examination
- Pass the ABIM maintenance of certification examination

### ***Target Audience***

- General internists and primary care physicians
- Subspecialists who need to remain up-to-date in internal medicine
- Residents preparing for the certifying examination in internal medicine
- Physicians participating for maintenance of certification in internal medicine (recertification)

### ***Educational Disclaimer***

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## SECTION I. HOW DO YOU COMPARE TO YOUR PEERS?

Welcome to the new Medical Knowledge Self-Assessment Program (MKSAP) *Performance Interpretation Guidelines with Norm Tables*. The NORM TABLES were based on the results of pre-publication test-takers who did not have access to the text, test answers, and critiques. The goal of this approach was to record test scores that realistically reflected physicians' knowledge.

This supplement will help you interpret your scores on the multiple-choice tests in the 16th edition of MKSAP and help you plan an individualized program of continuing education. MKSAP 16 can also help you identify strengths or weaknesses in specific subspecialty areas of internal medicine, enhance your general knowledge, keep you abreast of new developments, and prepare you for future examinations.

MKSAP 16 was composed of three program components, referred to as Parts A, B, and C. The first two components, Parts A and B, included *Text, Bibliographies, and Multiple-Choice Questions* for 11 internal medicine subspecialty books. Part A was composed of six subspecialty test sections, and Part B was composed of five subspecialty test sections. Parts A and B also included the *Answers, Critiques, Educational Objectives, and Bibliographies for Multiple-Choice Questions*. Part C is this supplement, *Performance Interpretation Guidelines with Norm Tables*.

You may also score your own tests by using the answer keys provided in Section V of this supplement and the Self-Scoring Instructions provided in Section VI.

To achieve the maximum educational benefit from Parts A and B of MKSAP 16 you should rely on the materials listed below:

1. *Text and Multiple-Choice Questions*
2. *Answers, Critiques, and Bibliographies*
3. Your *Individual Score Reports*, after submitting tests for CME credit
4. This supplement, *Performance Interpretation Guidelines with Norm Tables*



This supplement contains five additional sections.

SECTION II. PARTICIPANT GROUPS. This section describes participants who submitted their tests for the analysis of data and norm groups.

SECTION III. WHAT YOU NEED TO KNOW ABOUT YOUR SCORES. This section describes the steps taken to ensure the validity of the test questions and the scores. It also describes how the accuracy of the scores was evaluated and why this information is important.

SECTION IV. NORM TABLES. This section contains norm data for participants and instructions for using the norm tables.

SECTION V. ANSWER KEY AND PERCENTAGE ANSWERING CORRECTLY. This section contains an answer key for each subspecialty section and defines the percentage of participants answering each test question correctly.

SECTION VI. SELF-SCORING INSTRUCTIONS. This information will help you compute your percent correct score for each subspecialty section.

## **SECTION II. PARTICIPANT GROUPS**

Before you interpret the statistics provided in Section III and use the NORM TABLES, consider which participants' scores were used to develop the data. Groups were defined on the basis of information provided by participants in online question modules. These pre-publication participants, recruited through emails sent to ACP members and notices posted on the ACP Web site, were asked to use their existing knowledge to answer questions, without accessing clinical reference material. As part of a pre-test screening process, physicians were asked to identify their primary subspecialty and were excluded from accessing tests related to their primary area of expertise.

## **SECTION III. WHAT YOU NEED TO KNOW ABOUT YOUR SCORES**

### **A. INTRODUCTION**

Participants in MKSAP 16 may note that their scores vary greatly from the NORM TABLES scores. There may be a variety of reasons for this discrepancy. One, of course, is that some participants are significantly more knowledgeable or less knowledgeable than other participants.

Other factors that could contribute to score variance:

- Participants who read the text and soon thereafter answer the questions will do better on the test than someone who answers the questions without having read the text.
- Those who read the test questions just before studying the text and then answer the questions may also score higher.
- Some participants take the test as a "closed book" exercise; others do not.
- Some participants seek consultation from content experts; others attend educational group meetings before completing the tests.
- Your own scores may be influenced by such factors.

## B. CONTENT VALIDITY

The validity of the scores relied on the expertise of distinguished clinicians and educators who selected the content presented in each text section. Content in the text emphasized recent significant medical developments.

Test questions reflected primarily the material presented in each text section. After the questions were written, they passed through a series of editorial procedures designed to ascertain clarity, conciseness, and freedom from technical flaws. Even after the tests were administered, questions with unusual statistical performance were reviewed again by content experts. Questions in these tests that were determined to be flawed, too ambiguous, outdated, erroneous, or too subspecialized have been excluded from scoring. These questions are not counted toward CME credit. The excluded questions include:

- Hematology and Oncology: question 114
- Rheumatology: question 39
- General Internal Medicine: question 7
- Infectious Disease: question 97
- Pulmonary and Critical Care Medicine: question 65

### C. RELIABILITY (REL)

It is important that test scores provide reliable estimates of ability. The reliability (REL) coefficient was a measure of internal consistency that provided an estimate of the accuracy or stability of the scores. An examination was reliable to the extent that, if the ACP were to re-examine participants with a comparable form of the test, scores would be about the same on the second test as on the first. The reliability coefficient may range from 0.00 to 1.00.

When scores are used to provide educational feedback for the assessment of strengths and weaknesses, as they are for MKSAP 16, it is recommended that the reliability be .70 or higher. The table below shows the reliability for each subspecialty section.

<b>SUBSPECIALTY SECTION</b>	<b>REL</b>
Cardiovascular Medicine	.87
Dermatology	.80
Gastroenterology and Hepatology	.78
Hematology and Oncology	.89
Neurology	.82
Rheumatology	.86
Endocrinology and Metabolism	.82
General Internal Medicine	.85
Infectious Disease	.83
Nephrology	.84
Pulmonary and Critical Care Medicine	.85

#### D. STANDARD ERROR OF MEASUREMENT (SEM)

Ideally, the ACP would like to create tests that provide perfectly accurate measurements of participants' knowledge. In practice, however, scores are never completely free of error; they are *estimates* of what might be called "true ability." The standard error of measurement (SEM) is an index that indicates how much error there is in test scores.

Using the SEM, it is possible to define a score interval that indicates how far a test score is likely to stray from a participant's true ability. The interval is found by adding the SEM to a score and subtracting it from that score.

Observed scores are expected to fall within one SEM of the true ability of participants two times out of three, or approximately 67% of the time. A participant whose true ability was 70 would usually receive a score between 65 and 75 ( $70 - 5$  and  $70 + 5$ ) in a test. The table below shows the SEM for each subspecialty test.

<b>SUBSPECIALTY SECTION</b>	<b>SEM</b>
Cardiovascular Medicine	4.65
Dermatology	3.33
Gastroenterology and Hepatology	4.22
Hematology and Oncology	5.16
Neurology	4.29
Rheumatology	4.17
Endocrinology and Metabolism	3.89
General Internal Medicine	5.29
Infectious Disease	4.58
Nephrology	4.55
Pulmonary and Critical Care Medicine	4.31

## SECTION IV. NORM TABLES

The NORM TABLES are useful for determining your standing relative to that of participants who completed tests before the program was published.

Norm data are provided for each group of participants. The first column contains PERCENT CORRECT SCORES. The remaining columns contain PERCENTILE RANKS. The percentile rank indicates the percentage of the group that scores lower than the corresponding percent correct score.

To use the NORM TABLES, first choose a percent correct score from either your *Individual Performance Report* or your own hand score computations. Then select the table for the norm group with which you would like to compare yourself. In the first column, locate your PERCENT CORRECT SCORE. Then read across the table to find your PERCENTILE RANK.

For example, suppose that your score was 83% or 84% correct in Cardiovascular Medicine. At the percent correct scores of 83-84 on the NORM TABLE, read across the page to the Cardiovascular Medicine column to find your percentile rank of 97.3. Your percentile rank means that 97.3 of the group scored lower than you in Cardiovascular Medicine.

For each norm table, the *N* under the subspecialty section indicates the Number of participants who completed tests for that subspecialty before the program was published.

### NORM TABLES FOR MKSAP 16

Percent Correct Score	Cardiovascular Medicine (N=333)	Dermatology (N=246)	Gastroenterology and Hepatology (N=325)	Hematology and Oncology (N=263)	Neurology (N=224)
99 and above					
97-98					
95-96					
93-94		99.6			
91-92			99.7	99.6	
89-90	99.4	98.8			99.6
87-88	99.1	98.0		99.2	
85-86	97.9	95.9		98.9	
83-84	97.3	94.3		97.7	
81-82	95.8	88.2		96.6	99.1
79-80	94.3	84.6	99.4	96.2	98.2
77-78	92.2	79.3	99.1	94.7	97.8
75-76	90.4	67.5	98.5	93.2	96.9
73-74	87.7	63.0	97.2	88.2	95.1
71-72	85.3	51.2	96.6	85.2	90.2
69-70	80.8	47.2	94.8	77.2	87.5
67-68	73.6	37.0	91.1	71.1	83.5
65-66	65.8	31.7	87.4	61.6	75.0
63-64	52.9	22.4	82.8	50.6	67.4
61-62	44.7	20.7	79.1	44.5	64.7
59-60	39.0	15.5	72.0	38.8	58.5
57-58	29.7	10.2	63.7	31.6	51.3
55-56	25.5	8.1	57.2	24.7	44.2
53-54	18.9	6.1	48.0	17.9	34.8
51-52	15.3	5.7	36.9	14.1	24.1
49-50	12.3	2.9	28.0	10.7	19.6
47-48	7.8		21.5	8.4	16.1
45-46	6.6	2.0	14.8	7.6	10.3
43-44	5.1	1.6	10.2	5.3	8.0
41-42	3.9		8.6	4.6	6.7
39-40	3.3	0.8	4.6	4.2	5.4
37-38	3.0		3.7	3.4	4.9
35-36	2.4		2.8	2.7	2.7
33-34	1.2		1.2	1.9	1.8
31-32		0.4	0.9		1.3
29-30	0.9		0.6	1.5	
27-28	0.6		0.3		
25-26				0.8	0.9
23-24				0.4	0.5
21-22					
Below 20					

**NORM TABLES FOR MKSAP 16 (continued)**

Percent Correct Score	Rheumatology (N=298)	Endocrinology and Metabolism (N=170)	General Internal Medicine (N=314)	Infectious Disease (N=185)	Nephrology (N=179)	Pulmonary and Critical Care Medicine (N=158)
99 and above						
97-98						
95-96						
93-94						
91-92						
89-90	99.7	99.4	99.7	99.5		
87-88		98.8	98.7			99.4
85-86	98.7	95.9	98.1			
83-84	97.7		96.8	98.4	99.4	96.8
81-82	96.0	94.7	94.3		97.8	94.3
79-80	93.0	91.2	86.6		96.7	91.1
77-78	89.9	90.0	80.6		95.5	87.3
75-76	84.9	86.5	71.0	96.8		82.9
73-74	82.2	80.0	60.5	95.1	91.6	76.6
71-72	74.2	77.1	48.7	90.8	89.4	71.5
69-70	67.1	64.7	40.8	84.9	82.7	62.0
67-68	59.1	57.7	33.1	80.0	79.9	53.2
65-66	52.7	55.3	26.4	74.6	73.2	46.2
63-64	47.3	47.7	18.8	68.1	66.5	32.3
61-62	42.3	41.2	12.1	59.5	60.9	27.9
59-60	32.9	37.1	8.0	48.7	52.0	21.5
57-58	27.5	28.2	5.7	41.6	44.7	15.8
55-56	20.5	25.3	4.5	31.9	31.3	13.3
53-54	17.1	20.6	1.9	26.5	25.7	10.1
51-52	15.1	14.1	1.3	24.3	19.6	8.9
49-50	10.1	10.6		20.0	14.0	5.7
47-48	8.4	7.1	1.0	16.2	10.1	4.4
45-46	7.4	4.1		13.0		3.2
43-44	6.4	1.8	0.6	7.0	7.3	2.5
41-42	4.0	1.2	0.3	4.3	6.7	
39-40	3.7	0.6		3.8	4.5	1.9
37-38	3.4			2.7	3.4	1.3
35-36	2.4			1.6	2.8	
33-34	1.7			0.5	1.7	
31-32						
29-30	1.0				1.1	
27-28	0.7					
25-26	0.3					
23-24						
21-22						
Below 20						



**SECTION V. ANSWER KEY AND PERCENTAGE ANSWERING  
CORRECTLY**

This section contains an answer key for each subspecialty section and the percentage of pre-publication test-takers who answered each test question correctly. As noted previously, subspecialists were excluded from taking tests in their primary areas of expertise to ensure a more realistic measurement of the general knowledge of all participants.

<b>CARDIOVASCULAR MEDICINE</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	D	79	61	A	75
2	A	94	62	A	98
3	D	54	63	C	80
4	A	87	64	D	74
5	E	95	65	D	84
6	C	68	66	D	81
7	A	93	67	D	64
8	D	80	68	C	20
9	D	70	69	A	84
10	C	87	70	C	79
11	B	86	71	C	27
12	C	51	72	D	74
13	A	68	73	D	55
14	C	67	74	C	35
15	A	84	75	C	67
16	D	93	76	B	85
17	C	39	77	A	59
18	C	52	78	D	55
19	B	46	79	D	82
20	C	92	80	A	35
21	A	30	81	D	17
22	B	89	82	D	69
23	C	83	83	C	70
24	B	67	84	D	71
25	B	41	85	D	14
26	C	69	86	C	42
27	C	82	87	A	48
28	C	44	88	D	31
29	C	77	89	B	56
30	A	58	90	D	46
31	B	86	91	D	47
32	A	33	92	C	39

**CARDIOVASCULAR MEDICINE (continued)**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
33	B	86	93	D	58
34	C	63	94	D	47
35	C	77	95	C	59
36	D	57	96	B	64
37	E	75	97	B	51
38	C	55	98	C	83
39	A	71	99	D	52
40	B	17	100	C	83
41	B	55	101	B	62
42	B	18	102	C	49
43	A	43	103	C	93
44	D	49	104	A	37
45	B	8	105	A	43
46	C	44	106	D	37
47	C	53	107	B	44
48	A	86	108	A	38
49	C	47	109	C	59
50	A	76	110	D	83
51	C	95	111	C	59
52	A	31	112	C	86
53	B	86	113	C	31
54	A	86	114	D	71
55	B	53	115	C	53
56	C	90	116	C	5
57	B	22	117	C	61
58	B	68	118	A	55
59	A	20	119	C	64
60	B	49	120	A	71

**DERMATOLOGY**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	D	50	37	E	75
2	D	63	38	A	96
3	A	74	39	E	32
4	D	56	40	D	35
5	B	83	41	A	61
6	D	58	42	B	78
7	A	61	43	B	68
8	C	70	44	A	22
9	C	98	45	C	64
10	D	84	46	C	58
11	A	95	47	B	82
12	B	93	48	B	43
13	D	84	49	A	79
14	C	46	50	A	94
15	A	98	51	A	70
16	A	48	52	C	69
17	C	6	53	D	7
18	D	89	54	B	78
19	B	88	55	A	85
20	B	62	56	D	85
21	C	73	57	A	69
22	D	11	58	D	55
23	D	84	59	B	29
24	A	88	60	B	95
25	E	93	61	C	82
26	C	36	62	B	94
27	C	80	63	A	78
28	E	69	64	D	82
29	A	86	65	B	70
30	A	87	66	A	87
31	B	95	67	C	83
32	A	21	68	C	91
33	A	74	69	B	38
34	E	41	70	D	61
35	B	92	71	A	72
36	D	75	72	B	63

**GASTROENTEROLOGY AND HEPATOLOGY**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	A	74	49	B	42
2	D	74	50	A	59
3	B	42	51	D	43
4	E	90	52	B	82
5	A	62	53	C	45
6	D	70	54	B	63
7	A	99	55	E	58
8	D	60	56	C	23
9	A	63	57	D	71
10	D	66	58	A	37
11	D	96	59	B	45
12	D	71	60	C	87
13	A	50	61	A	57
14	B	82	62	B	16
15	A	67	63	A	45
16	C	13	64	A	52
17	B	19	65	C	51
18	C	33	66	B	22
19	D	10	67	D	66
20	A	55	68	D	37
21	C	35	69	D	61
22	E	67	70	A	37
23	A	63	71	D	66
24	A	53	72	B	82
25	C	89	73	D	75
26	D	45	74	C	71
27	B	64	75	A	24
28	C	18	76	B	82
29	D	51	77	B	57
30	E	84	78	A	59
31	A	83	79	D	72
32	B	69	80	A	35
33	C	94	81	D	30
34	B	76	82	D	29
35	B	18	83	C	3
36	B	10	84	C	55
37	A	59	85	B	31
38	D	11	86	A	87
39	D	2	87	C	25
40	B	42	88	C	9
41	D	69	89	E	19
42	D	85	90	A	39
43	D	61	91	D	69
44	B	43	92	B	47
45	C	54	93	D	68

**GASTROENTEROLOGY AND HEPATOLOGY (continued)**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	A	78	94	A	89
47	D	46	95	A	39
48	A	30	96	B	80

## HEMATOLOGY AND ONCOLOGY

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	E	46	73	E	71
2	A	76	74	C	31
3	E	43	75	C	88
4	B	92	76	B	39
5	C	33	77	E	43
6	C	66	78	D	64
7	D	90	79	E	62
8	A	43	80	C	96
9	B	79	81	C	33
10	C	80	82	C	62
11	C	75	83	A	57
12	C	57	84	D	58
13	D	74	85	C	40
14	D	83	86	D	19
15	A	59	87	A	46
16	D	81	88	C	42
17	A	92	89	C	47
18	C	57	90	E	72
19	B	66	91	B	66
20	A	57	92	D	49
21	E	54	93	B	37
22	D	22	94	B	74
23	E	64	95	C	32
24	C	67	96	C	73
25	B	93	97	B	69
26	A	57	98	B	59
27	D	75	99	A	74
28	A	21	100	D	37
29	C	61	101	B	95
30	D	88	102	D	76
31	D	69	103	A	50
32	B	46	104	C	41
33	C	22	105	D	32
34	C	44	106	D	24
35	A	78	107	B	66
36	D	62	108	D	75
37	B	92	109	B	89
38	A	59	110	A	65
39	A	75	111	A	71
40	A	71	112	B	75
41	C	86	113	A	70
42	D	67	114	EXCLUDED	—
43	B	37	115	B	73
44	D	88	116	C	11
45	A	93	117	C	67

<b>HEMATOLOGY AND ONCOLOGY (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	A	68	118	A	26
47	A	32	119	C	27
48	D	49	120	D	46
49	A	73	121	D	65
50	D	72	122	B	24
51	B	61	123	E	67
52	D	56	124	A	75
53	B	60	125	A	86
54	B	90	126	C	27
55	D	59	127	A	63
56	E	89	128	C	83
57	E	67	129	A	66
58	B	73	130	A	63
59	B	92	131	B	76
60	C	52	132	B	35
61	C	60	133	C	70
62	A	65	134	C	88
63	D	89	135	E	29
64	A	72	136	D	67
65	D	64	137	B	12
66	B	87	138	B	82
67	C	44	139	A	82
68	A	69	140	E	55
69	A	41	141	E	58
70	B	39	142	A	60
71	A	65	143	A	31
72	B	55	144	B	79

**NEUROLOGY**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	C	27	49	A	42
2	B	81	50	B	38
3	E	35	51	C	56
4	A	91	52	A	35
5	B	65	53	A	61
6	D	89	54	D	71
7	B	67	55	A	72
8	A	67	56	C	52
9	D	86	57	B	5
10	C	77	58	E	19
11	B	54	59	D	85
12	A	46	60	C	62
13	D	77	61	B	54
14	A	52	62	A	88
15	D	38	63	D	50
16	D	33	64	C	79
17	A	44	65	B	41
18	C	88	66	C	53
19	D	78	67	B	31
20	E	83	68	A	58
21	A	91	69	C	83
22	B	39	70	E	25
23	C	54	71	B	75
24	B	83	72	D	42
25	E	29	73	A	35
26	C	46	74	B	92
27	A	47	75	E	68
28	C	15	76	D	60
29	B	75	77	C	53
30	E	55	78	B	53
31	C	73	79	A	73
32	A	26	80	C	51
33	B	75	81	B	65
34	D	40	82	C	86
35	B	22	83	A	24
36	A	71	84	B	53
37	D	17	85	C	33
38	B	81	86	B	72
39	A	42	87	A	42
40	C	64	88	D	49
41	E	66	89	B	86
42	B	40	90	C	80
43	B	73	91	B	85
44	A	36	92	A	43
45	D	75	93	C	68



<b>NEUROLOGY (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	C	57	94	B	60
47	B	17	95	B	63
48	D	35	96	A	31

## RHEUMATOLOGY

QUESTION NUMBER	ANSWER KEY	PERCENT CORRECT	QUESTION NUMBER	ANSWER KEY	PERCENT CORRECT
1	A	40	49	B	71
2	D	73	50	A	88
3	D	90	51	D	79
4	A	26	52	E	93
5	C	74	53	D	77
6	B	32	54	C	90
7	C	43	55	B	23
8	D	85	56	A	81
9	D	65	57	B	57
10	B	52	58	A	84
11	C	80	59	B	84
12	D	86	60	B	89
13	D	86	61	E	14
14	A	40	62	C	97
15	A	88	63	C	29
16	C	85	64	B	58
17	D	43	65	D	70
18	B	61	66	B	33
19	C	40	67	B	41
20	A	88	68	D	58
21	A	31	69	A	66
22	A	65	70	A	60
23	E	53	71	B	39
24	D	63	72	C	49
25	A	81	73	A	71
26	D	64	74	E	74
27	D	89	75	A	59
28	C	52	76	D	81
29	A	83	77	C	18
30	D	58	78	C	44
31	D	45	79	E	65
32	D	79	80	B	70
33	A	84	81	A	66
34	C	30	82	D	63
35	C	59	83	A	81
36	D	64	84	D	36
37	C	74	85	D	55
38	A	94	86	D	90
39	EXCLUDED	—	87	A	73
40	B	55	88	E	73
41	D	62	89	E	83
42	B	56	90	A	68
43	B	32	91	C	50
44	A	69	92	C	62
45	B	56	93	B	65

<b>RHEUMATOLOGY (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	E	69	94	D	64
47	A	83	95	C	56
48	C	36	96	B	48

**ENDOCRINOLOGY AND METABOLISM**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	B	54	43	D	92
2	B	54	44	A	65
3	D	74	45	B	47
4	B	41	46	C	85
5	B	42	47	C	59
6	E	81	48	A	27
7	A	75	49	B	66
8	D	29	50	B	82
9	C	84	51	C	25
10	A	80	52	D	42
11	D	51	53	A	96
12	B	98	54	C	44
13	B	25	55	B	61
14	A	81	56	D	56
15	D	90	57	B	76
16	D	92	58	E	19
17	A	95	59	D	77
18	C	51	60	A	94
19	B	84	61	C	54
20	A	71	62	D	39
21	D	51	63	A	30
22	B	62	64	A	67
23	C	38	65	B	77
24	C	8	66	D	86
25	D	50	67	A	59
26	A	58	68	D	61
27	C	51	69	B	88
28	B	33	70	D	81
29	B	65	71	C	83
30	C	38	72	D	92
31	B	51	73	A	64
32	C	78	74	C	72
33	A	71	75	C	86
34	B	54	76	C	64
35	E	66	77	A	29
36	B	81	78	B	51
37	A	70	79	C	49
38	D	66	80	A	71
39	A	68	81	B	94
40	B	46	82	C	31
41	D	64	83	B	51
42	C	93	84	C	83

**GENERAL INTERNAL MEDICINE**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	A	97	85	A	92
2	D	89	86	E	75
3	A	87	87	B	51
4	D	40	88	A	75
5	B	52	89	D	85
6	D	84	90	C	56
7	EXCLUDED	—	91	A	69
8	D	46	92	A	65
9	B	75	93	E	67
10	D	62	94	D	67
11	A	49	95	A	92
12	A	68	96	B	92
13	C	82	97	D	73
14	A	86	98	D	56
15	D	98	99	C	87
16	D	74	100	D	96
17	A	70	101	B	86
18	E	27	102	B	28
19	D	77	103	B	48
20	C	90	104	B	78
21	B	59	105	D	89
22	A	86	106	B	82
23	A	45	107	B	22
24	D	89	108	D	85
25	D	93	109	D	86
26	A	55	110	D	95
27	A	79	111	C	76
28	A	19	112	C	94
29	D	95	113	C	61
30	D	60	114	D	89
31	D	77	115	D	93
32	C	55	116	C	70
33	D	91	117	B	67
34	B	73	118	C	86
35	B	83	119	D	49
36	B	75	120	A	60
37	A	75	121	B	70
38	B	76	122	C	80
39	B	96	123	C	38
40	A	24	124	A	77
41	C	68	125	D	61
42	B	90	126	C	89
43	B	90	127	A	73
44	B	98	128	A	94
45	D	64	129	E	60

<b>GENERAL INTERNAL MEDICINE (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	B	76	130	C	99
47	C	46	131	C	58
48	B	67	132	D	88
49	A	63	133	D	62
50	B	33	134	D	70
51	D	41	135	B	68
52	B	36	136	D	58
53	C	51	137	B	68
54	B	72	138	D	86
55	A	71	139	C	67
56	C	71	140	B	63
57	D	95	141	D	79
58	D	57	142	D	82
59	D	75	143	C	86
60	E	61	144	A	62
61	C	59	145	B	17
62	C	75	146	C	82
63	B	62	147	A	68
64	C	71	148	A	91
65	B	51	149	D	82
66	D	88	150	A	89
67	A	95	151	A	56
68	D	56	152	C	65
69	B	46	153	C	91
70	A	79	154	C	58
71	C	81	155	D	75
72	C	89	156	C	85
73	A	93	157	B	57
74	D	55	158	D	39
75	A	40	159	D	94
76	D	69	160	B	26
77	D	13	161	B	50
78	A	95	162	A	34
79	C	62	163	A	69
80	B	63	164	C	31
81	B	94	165	E	89
82	A	70	166	A	74
83	A	84	167	A	63
84	C	84	168	D	78

**INFECTIOUS DISEASE**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	C	72	55	A	68
2	A	47	56	E	81
3	A	34	57	D	32
4	A	49	58	A	54
5	A	92	59	B	41
6	D	78	60	B	43
7	B	28	61	D	26
8	C	54	62	D	47
9	B	23	63	A	43
10	A	39	64	C	87
11	C	65	65	D	82
12	B	37	66	D	90
13	B	66	67	B	45
14	C	68	68	D	71
15	B	28	69	A	57
16	D	96	70	A	25
17	C	42	71	B	65
18	D	56	72	B	49
19	D	28	73	D	64
20	C	9	74	D	71
21	A	59	75	D	71
22	D	93	76	A	50
23	C	77	77	A	51
24	C	74	78	C	57
25	A	70	79	B	52
26	C	56	80	A	55
27	A	34	81	C	79
28	D	79	82	E	49
29	D	84	83	C	85
30	D	36	84	A	23
31	B	52	85	E	41
32	D	55	86	D	63
33	A	81	87	B	92
34	B	87	88	D	88
35	B	79	89	B	45
36	D	57	90	D	78
37	C	25	91	A	75
38	B	85	92	D	74
39	A	7	93	B	62
40	A	77	94	D	64
41	D	52	95	A	70
42	C	45	96	C	37
43	E	68	97	EXCLUDED	—
44	C	74	98	A	80
45	A	50	99	B	68

<b>INFECTIOUS DISEASE (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	C	38	100	D	39
47	A	52	101	B	66
48	D	74	102	A	37
49	C	82	103	C	58
50	C	62	104	B	72
51	A	70	105	A	43
52	E	45	106	C	69
53	D	74	107	D	39
54	C	58	108	D	50



**NEPHROLOGY**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	A	47	55	A	39
2	C	85	56	B	64
3	C	38	57	C	77
4	B	61	58	C	78
5	D	80	59	C	88
6	D	44	60	C	66
7	D	69	61	D	89
8	B	88	62	D	43
9	A	29	63	D	70
10	B	60	64	A	42
11	D	84	65	B	68
12	A	15	66	D	55
13	D	72	67	D	58
14	B	70	68	B	59
15	A	59	69	B	47
16	A	79	70	B	82
17	B	72	71	A	94
18	C	34	72	D	36
19	A	51	73	C	75
20	B	76	74	D	64
21	E	51	75	C	77
22	C	49	76	A	53
23	A	79	77	A	54
24	D	58	78	D	66
25	C	72	79	D	42
26	A	68	80	C	37
27	B	60	81	A	47
28	B	15	82	C	91
29	A	53	83	D	72
30	B	42	84	D	69
31	A	25	85	A	22
32	C	17	86	C	51
33	B	37	87	D	47
34	B	75	88	D	65
35	A	97	89	C	69
36	A	39	90	C	82
37	B	6	91	A	39
38	B	83	92	C	74
39	D	55	93	D	66
40	D	43	94	C	27
41	D	93	95	A	82
42	E	18	96	C	47
43	C	78	97	D	49
44	B	80	98	D	71
45	C	44	99	D	64

<b>NEPHROLOGY (continued)</b>					
<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	A	70	100	B	60
47	B	91	101	C	37
48	C	17	102	C	68
49	C	77	103	A	61
50	D	64	104	A	55
51	B	31	105	D	55
52	A	29	106	C	55
53	E	53	107	C	88
54	D	51	108	B	14

**PULMONARY AND CRITICAL CARE MEDICINE**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
1	B	68	55	C	68
2	D	75	56	B	46
3	C	84	57	A	87
4	C	53	58	C	85
5	D	91	59	B	78
6	B	46	60	A	94
7	D	53	61	D	79
8	C	61	62	C	29
9	B	34	63	C	59
10	B	99	64	A	75
11	D	21	65	EXCLUDED	—
12	D	63	66	C	92
13	D	76	67	D	48
14	A	30	68	B	91
15	D	72	69	D	94
16	C	79	70	A	96
17	E	56	71	D	12
18	A	75	72	B	46
19	B	34	73	C	81
20	A	45	74	A	85
21	A	87	75	E	63
22	B	67	76	A	73
23	C	73	77	D	33
24	A	94	78	A	49
25	C	62	79	D	64
26	C	92	80	B	78
27	C	15	81	D	76
28	D	77	82	B	25
29	A	61	83	B	89
30	A	72	84	D	77
31	D	75	85	D	65
32	B	69	86	B	57
33	A	93	87	D	97
34	B	65	88	B	73
35	C	56	89	A	68
36	A	66	90	C	80
37	D	44	91	B	64
38	A	83	92	C	68
39	D	74	93	A	72
40	C	87	94	B	11
41	B	95	95	C	78
42	B	63	96	C	87
43	C	72	97	E	80
44	B	97	98	B	67
45	A	65	99	A	13

**PULMONARY AND CRITICAL CARE MEDICINE (continued)**

<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>	<u>QUESTION NUMBER</u>	<u>ANSWER KEY</u>	<u>PERCENT CORRECT</u>
46	D	59	100	D	60
47	B	70	101	E	32
48	A	34	102	A	54
49	D	72	103	A	55
50	D	73	104	C	68
51	B	70	105	D	30
52	A	92	106	C	43
53	C	85	107	A	61
54	C	57	108	B	54

## SECTION VI. SELF-SCORING INSTRUCTIONS

Compute your percent correct score as follows:

Step 1. Give yourself a point for each correct response to each question in the test in which you are working.

Step 2. Divide the number of correct responses in Step 1 by the number of “accepted” questions for the test in which you are working. The number of “accepted” questions in each test is listed in the table at the bottom of this page.

Step 3. Multiply the result by 100.

The final result will be your total percent score, which you may compare to the Norm Tables under Section IV.

<b>Example Infectious Disease</b>	
Step 1: Record your points.	105
Step 2: Divide the result by 107, which is the total number of “accepted” questions.	$105 \div 107$
Step 3: Multiply result by 100.	$.981 \times 100$
Total percent correct score	98%

<b>Subspecialty Section</b>	<b>Number of <u>Published</u> Questions</b>	<b>Number of <u>Excluded</u> Questions</b>	<b>Number of <u>Accepted</u> Questions</b>
Cardiovascular Medicine	120	0	120
Dermatology	72	0	72
Gastroenterology and Hepatology	96	0	96
Hematology and Oncology	144	1	143
Neurology	96	0	96
Rheumatology	96	1	95
Endocrinology and Metabolism	84	0	84
General Internal Medicine	168	1	167
Infectious Disease	108	1	107
Nephrology	108	0	108
Pulmonary and Critical Care Medicine	108	1	107