
RESULTS OF THE 2016 PRIMARY EXAMINATION IN SONOGRAPHY



January 2017

Purpose. This report summarizes performance of examinees on the ARRT primary examination in Sonography during 2016. The ARRT Sonography exam has been administered since 2000, and the primary pathway has been available for graduates of accredited educational programs since 2005.

Exams administered in 2016 were based on content specifications that went into effect in January 2013. These specifications are based on the most recent practice analysis study, completed in 2012. The 2013 update did not make major changes to the content covered by the exam, but the structure of the exam underwent a major revision. The most significant change was to split the procedures section into three content sections: C. Abdominal Procedures; D. Obstetrical and Gynecological Procedures; and, E. Superficial Structures and Other Sonographic Procedures. This change allowed for a section score to be calculated for each of these sections. The passing criteria for the exam was then changed to require a passing candidate to achieve a total scaled score of 75 or greater on the total exam, and in addition achieve section scaled scores of 7.5 or greater in both sections C and D.

SONOGRAPHY EXAM CONTENT CATEGORIES

<u>SECTION</u>	<u>#QUESTIONS</u>
A. Patient Care	29
B. Physical Principles of Ultrasound	115
C. Abdominal Procedures	76
D. Obstetrical and Gynecological Procedures	108
E. Superficial Structures and Other Sonographic Procedures	32

AIUM Recognition of ARRT Sonography Exam: Beginning January 1, 2013 The American Institute of Ultrasound in Medicine (AIUM) recognizes The American Registry of Radiologic Technologists' (ARRT) general sonography certification as an accepted credential for sonographers in practices accredited by AIUM in abdominal/general, obstetrics and/or gynecologic ultrasound. Sonographers earning ARRT's general sonography certification – R.T.(S)(ARRT) – satisfy AIUM practice accreditation standards. Additional information on AIUM recognition of the ARRT Sonography credential can be found at: <https://www.arrt.org/News/articles/2012-11-1-AIUM-Recognizes-ARRT-Sonography-Certification.aspx>

Pass Rate. As mentioned above, the new passing requirement instituted in 2013 includes achieving a total scaled score of 75 or greater, and section scaled scores of 7.5 or greater in sections C and D. The pass rate for 2016 was 64.6%, with 159 of 246 first-time examinees passing. Of the 87 first-timers that failed in 2016, 78 had a total scaled score of less than 75, the other nine failed because they did not achieve a section scaled score of 7.5 or greater in either section C or D.

Total Scores. Total exam raw scores ranged from 109 (30.3% correct) to 342 (95.0% correct). The mean raw score was 258.5 (71.8% correct) with a standard deviation of 49.7 (13.8%). Raw scores are converted to scaled scores ranging from 1 to 99, with 75 defined as a passing point. The mean scaled score was 78.1, with a standard deviation of 10.5.

An additional 12 examinees took the Sonography exam through the postprimary pathway, and ten of them passed (83.3% pass rate). The mean scaled score of the postprimary Sonography examinees was 87.9. The summaries in this document do not include the examinees who took the exam via the postprimary pathway.

Section Scores. To evaluate performance in the various content areas, percent correct and scaled scores were computed for each section of the exam. The table below indicates how examinees performed in the five major content areas.

Percent Correct and Scaled Scores on Five Major Sections

Section	<u>Percent Correct</u>			<u>Scaled Scores</u>		
	Low	High	Mean	Low	High	Mean
A. Patient Care	34	97	73.8	5.0	9.7	8.0
B. Physical Principles	25	96	69.7	4.3	9.6	7.7
C. Abdominal Procedures	28	100	75.7	4.5	9.9	8.1
D. Obstetrics/Gynecological	25	96	72.4	4.3	9.7	7.9
E. Superficial/Other	25	94	66.1	4.3	9.5	7.4
TOTAL	30	95	71.8	47	96	78.1

School Performance. Twenty schools had three or more first-time examinees in 2016. Mean scaled scores for these 20 schools ranged from 66.6 to 90.8. Pass rates for the schools ranged from 20% to 100%; six schools had 100% pass rates.

Program Director Reports. Educators may always produce summary reports for their program, at their convenience, at the ARRT website, ARRT.ORG under Educators/Program Director Site. Please note that in order for reports to be generated, the time frame of the summary must include at least three examinees.