
RESULTS OF THE 2013 PRIMARY EXAMINATION IN SONOGRAPHY



January 2014

Purpose. This report summarizes performance of candidates on the ARRT primary certification exam in Sonography in 2013. Graduates of accredited educational programs have been eligible to take the ARRT Sonography exam since 2005. In 2011 the exam was expanded to 360 live items and 40 pilot items. A practice analysis study was completed in 2012, and the content specifications, eligibility requirements, and passing criteria were updated for 2013.

The content covered by the exam in 2013 was not greatly changed from 2012 but the structure of the exam was altered so that the procedures section was divided 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 was then changed, requiring a passing candidate to achieve a total scaled score of 75 or greater on the exam, in addition to section scaled scores of 7.5 or greater in both sections C and D.

2012 SONOGRAPHY EXAM CONTENT CATEGORIES

	<u>SECTION</u>	<u>#QUESTIONS</u>
A.	Patient Care	29
B.	Physical Principles of Ultrasound	115
C.	Sonographic Procedures	216

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	<u>SECTION</u>	<u>#QUESTIONS</u>
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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) – after that date satisfy AIUM practice accreditation standards.

New Passing Criteria. As mentioned above, the new passing requirement for 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 2013 was 81.6%, with 124 of 152 first-time candidates passing. Of the 28 first-timers that failed in 2013, 22 had a total scaled score of less than 75, the other six 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 154 (42.8% correct) to 342 (95.0% correct). The mean raw score was 281.5 (78.2% correct) with a standard deviation of 37.3 (10.4%). Raw scores are converted to scaled scores ranging from 1 to 99, with 75 defined as a passing point. The mean scaled score was 83.3, with a standard deviation of 7.7.

An additional 14 candidates took the Sonography exam through the post-primary pathway, and 10 of them passed (71.4% pass rate). The mean scaled score of the post-primary Sonography candidates was 82.8. The summaries below do not include the candidates who took the exam via the post-primary pathway.

Section Scores. To evaluate how students performed in the various content areas, percent correct and scaled scores were computed for each section of the exam. The table below indicates how students 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	21	100	76.8	4.0	9.9	8.2
B. Physical Principles	45	97	77.9	5.9	9.7	8.3
C. Abdominal Procedures	42	99	82.2	5.6	9.9	8.6
D. Obstetrics/Gynecological	35	96	78.0	5.1	9.7	8.3
E. Superficial/Other	38	97	74.1	5.3	9.7	8.0
TOTAL	43	95	78.4	57	96	83.3

School Performance. Fifteen schools had three or more first-time candidates in 2013. Mean scaled scores for these 15 schools ranged from 76.1 to 88.4. Pass rates for the schools ranged from 56% to 100%; five 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.