ACCOUNTANTS TOWARDS THE ACCOUNTING OF KNOWLEDGE:

An analysis of the results of the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants

Doctor José Antonio DE FRANÇA, Accountant and Economist, Professor of the Department of Accounting and Actuarial Sciences at University of Brasilia, Brazil.
e-mail: franca@itecon.com.br and franca@unb.br

Doctor Clésia Camilo Pereira, Accountant, Professor of the Department of Accounting and Actuarial Sciences at University of Brasilia, Brazil.
e-mail: clesia@unb.br>

Doctor Eduardo Tadeu VIEIRA, Accountant, Director of the Faculty of Economics, Administration, Accounting and Public Management at University of Brasilia, Professor of the Department of Accounting and Actuarial Sciences at University of Brasilia, Brazil.
e-mail: eduardot61@hotmail.com eduardot@unb.br

Abstract

This article analyses the results of the first technical qualification exam for the creation of the National Register of Forensic Accountants (NRFA or CNPC, acronym in Portuguese) in Brazil, conducted by the Brazilian Federal Council of Accounting (BFCA or CFC, acronym in Portuguese) in 2017. Forensic accounting as a specialized knowledge in accounting presents the paradox of the demand for multidisciplinary knowledge as requirement for assisting in the dispute involving equity interest. In this respect, this research aims to investigate the degree of spatial concentration of the performance and the level of knowledge in forensic accounting, separated by geographic region and federation unit (FU), based on the results of the first exam for the creation of the CNPC. The analysis is supported on the assessment of the candidates' performance, in the exam's tests, by using the clustering method. The results present robust evidences that it is necessary to improve continuing professional education and show that the highest spatial concentration of performance and level of specialized knowledge are in the South Region and in the Federal District of Brazil, contradicting the premise that they would be in the Southeast Region, as it is the most developed one in Brazil.

Keywords: Forensic accounting; concentration of performance; knowledge specialization; exam of technical qualification; paradox of expertise.

1. Introduction

Knowledge as an intangible asset is a basic requirement for the sustainable development of an economic activity of a given culture and of a society. Both the level of knowledge and the spatial concentration of its application are the approaches of this article to assess forensic accounting expertise in Brazil. Forensic accounting as a specialized activity does not dismiss multidisciplinary knowledge as a necessary attribute to assist in the resolution of disputes involving equity interest. The spatial concentration of performance in a specialized activity is a consequence of the economic or industrial agglomeration that occur with the growth of cities (Glaeser, 1999), and forensic accounting is one of the satellite activities of such agglomeration.

Due to the role played by forensic accounting in the scope of the urban agglomeration, the Brazilian Federal Council of Accounting (BFCA or CFC, acronym in Portuguese), in 2017, understood that accountants, in order to occupy the position of forensic accountants, must attest their knowledge by passing a technical qualification exam. This scenario serves as grounds for this article, which fosters a reflection about the technical knowledge of Brazilian accountants, from the results of the first exam of technical qualification for the creation of the National Register of Forensic Accountants ((NRFA or CNPC, acronym in Portuguese).

The reflection calls for an analysis of the spatial concentration of performance and the level of knowledge shown by the accountants sitting for the technical qualification exam, and it incorporates studies developed by the economics of knowledge. According to these studies, knowledge does not exist all by itself, but it is the most powerful engine of production of an individual, which enables them to subdue nature and force it to satisfy their wishes, it is a passport to conquer citizenship and economic development, as discussed by Marshall (1890), Lundvall and Johnson (1994), OECD (1981), Field (2001) and Lundvall (2004).

Both the NRFA and the previously created National Register of Independent Auditors (NRIA or CNAI, acronym in Portuguese) are relevant indicators of the accounting profession to those who use any accounting services, as these registers require continuing education, which is lifelong education, as discussed by Field (2001). A third indicator is the requirement to take the sufficiency exam to act as a professional accountant.

Because forensic accountants are both specialists and multidisciplinary professionals, which indicates a paradox, they must combine specific technical knowledge with knowledge from other areas, such as law, economics, business, mathematics and technology. Regardless the identification of how comprehensive such knowledge is, this first exam must be considered as a minimum requirement, bearing in mind that it focuses on specific knowledge. The need for multidisciplinary areas of knowledge is dictated by the demand for services like the valuation of equity assets, the assessment of fair value in financial instruments, calculations of compensations, validations of routine and process, among others.

Given the spatial geography of the demand to take the technical qualification exam and the results published by the Brazilian Federal Council of Accounting (BFCA or CFC, acronym in Portuguese), this article's motivation is centered on understanding the degree of spatial concentration of the forensic accounting activity as well as on the concept of "region", as addressed by Isard, Schooler and Vietorisz

(1959) and Cookie and Leydesdorff (2006).

In this respect, the research problem is developed to identify and investigate the geographic region (region) and federation unit (FU) with the highest concentration of performance in forensic accounting and the highest level of technical knowledge shown in the results of the first technical qualification exam for the creation of the CNPC.

The methods proposed to obtain answers to the research questions are **(a)** to organize the candidates' applications by federation unit (FU) and region; **(b)** to cluster the candidates by the performance *status* (pass, fail, absent) in accordance with the publication of the exam's results; and **(c)** to obtain and assess the performance *status*, by region and FU, for each task of the exam. These objectives, supported on the clustering method (Haddad, 1977; IPEA, 2001, p. 318-319), and adapted for the accounting of knowledge, are sufficient to answer the research problem.

The result expected from this first exam is the spatial concentration of the performance of accountants who wish to join CNPC in the Southeast region, the most developed one in Brazil. This result shows similar characteristics to those present in agglomerations studies in regional and sectoral development, as discussed by Lodder (1974), Haddad (1977) and Ferreira (1996). The CNPC acts as a reference of technical-professional qualification of accountants prepared to work with forensic accounting and best serve the demands of society.

The research results are relevant to the area literature because, by using the clustering method, they show how accounting knowledge is distributed over the Brazilian territory and how this level of knowledge meets the demands to exercise the forensic accounting specialty. However, it is the first exam with such characteristics and, because of this, there are not any previous data, so it is not reasonable to generalize the predominance of the results.

Thus, given the motivation that stimulates the investigation on forensic accounting knowledge, this article is structured as follows: **2. Theoretical discussion**, which dialogues with the main contributions of the area literature for the topic; **3. Preliminary methodology**, which presents models used in relating research that contribute to enrich the area literature; **4. Methodology**, which describes the model expected to meet the investigation presented as the research problem**; 5. Description of data and analysis of results**, which presents and analyzes the answers of the tests collected by applying the model, and answer the research problem; **6. Conclusion**, which summarizes the research findings as well as its main contributions; and lastly, the **References**, where the related studies that contribute to science and to this article are listed.

2. Theoretical discussion

This section discusses results of research studies with similar objects to the one of the present article, which contribute to foster the area literature and to give grounds to the proposed investigation. The discussion is divided into the following subsections: **(a)** the purpose of the technical qualification exam;

2.1 The purpose of the technical qualification exam

The regulation of the Brazilian accounting system, under the Brazilian Federal Council of Accounting (BFCA or CFC, acronym in Portuguese) responsibility, as manager of the CFC/CRCs (Regional

Accounting Councils) system, encompasses the professional activity in all specialties of the accounting profession (Decree-Law no. 9,295/1946). To take up this task, CFC has established the sufficiency exam, through Resolution 853/99, regulated by CFC's Resolution no. 1,301/10, to assess the minimum capacity for professional practice of those graduating in accounting.

Regardless of the capacity shown in the sufficiency exam when graduating in accounting, as of the first decade of the 2000s, the CFC has established the technical qualification exam for accountants specialized in Auditing (Resolution no. 1,019/05) and, more recently, the technical qualification exam for accountants specialized in Forensic Accounting (Resolution no. 1,502/16).

These Resolutions have created two registers of specialists, Resolution no.1,019/05 created the National Register of Independent Auditors (NRIA or CNAI, acronym in Portuguese) and Resolution no. 1,502/16 created the National Register of Forensic Accountants (NRFA or CNPC, acronym in Portuguese). Each register has the purpose of showing society which professionals have proved to have the minimum capacity required to conduct and execute the duties of their specialty.

Resolution no. 1,502/16 provides the legal framework for CNPC's exam, the object of this article. The first exam was held in 2017 and its content was extracted from the Brazilian Code of Civil Procedure (Law no. 13,105/15), from technical regulations aligned with the accounting conceptual framework, Resolution no. 1,374/11, and from other norms intrinsic to the profession.

However, in addition to meeting the regimental demands of the accounting profession, the technical qualification exam, as a requirement for the admission in the specialty, demands maintenance of knowledge through continuing education. Continuing education meets an important requirement of knowledge, which is the lifelong education, as discussed by Field (2001). This discussion retakes the debate regarding the rights to citizenship, strengthened as of the First World War. This debate goes back to the Bolshevik Russian revolution and to the United Kingdom's official statement that adult education is a permanent necessity, as it is an essential attribute for exercising citizenship, as the writer argues.

2.2 Knowledge promoting regional and sectoral development

Knowledge society is the boost of development that leads individuals to the several *statuses* of citizenship. For no other reason would Marshall (1890), in the introductory section of book IV addressing the agents of production, land, labor, capital and organization, declare that knowledge is the individual's most powerful engine of production because it enables them to subdue nature and force it to satisfy their wishes.

Knowledge production stands out as a competitivity advantage in management and procedure leadership. On this matter, Lundvall and Johnson (1994), when discussing the aspects of remembering and forgetting, declare that human knowledge does not exist all by itself. It is coded into the central nervous system of human beings and may get lost quite easily and quickly. They also presume that, in general, for institutional and epistemological reasons, learning is cumulative, in such a way that the stock of knowledge is increasing over time. However, if not actively used, knowledge can deteriorate and, depending on the context, can be quickly destroyed.

When studying the economics of knowledge, Lundvall (2004) addresses matters like private/public,

local/global, tacit/codified knowledge. Based on this approach, he questions: what constitutes the knowledge base? At what level can we locate and define a knowledge base? What are the specificities of local and sector specific knowledge bases? How stable is the knowledge base? To find an answer to these questions, he introduces themes like: basic concepts related to knowledge and learning; the contribution of economic analysis to the understanding of production, mediation and use of knowledge; new economic trends and the formation of a "learning economy". However, since there are not swift responses to these inquiries, the writer contrasts the neoclassic school with the Austrian school and concludes that the Austrian economists treat learning as a fundamental process in the analysis of market transactions, and that knowledge and learning play a relevant role in economic development.

The agglomerations of specialists, which include forensic accountants, is associated to OECD's (1981) statement, present in the 1980 Frascati Manual, that says that the technological and scientific activities developed by UNESCO comprise systematic activities which are closely concerned with the generation, advancement, dissemination and application of scientific and technical knowledge in all fields of science and technology. In addition, they also include research and development, technical and scientific education, training and scientific and technological services. In this declaration, forensic accounting as a service stands out in the application of knowledge.

Cooke and Leydesdorff (2006), discussing the construction of advantage in regional development based on the economics of knowledge, approach conceptual matters regarding the term "region". They state that "region" has its origin in the Latin *region,* which stems from *regere*, meaning "to govern". Comprehensively, they state that "region" means the governance of policies to assist processes of economic development. Restrictively, "region" is an administrative division of a country.

In the study *Industrial Complex Analysis and Regional Development* applied in Puerto Rico, Isard, Schooler and Vietorisz (1959) comment the discussion about the concept of region among researchers. In this discussion, the prevailing understanding is that region must be conceived as a unit of area with a significant problem to be studied, which may vary depending on the researcher's stance and on other characteristics at a given situation.

Glaeser (1999) discusses the role of cities in the acquisition of skills and learning opportunities of individuals, in the process of urban agglomeration. The discussed model predicts that the accumulation of human capital is beneficiated by the exchange of experiences among individuals as well as by increases in wages. Lastly, the author discusses that economies of scale offered by urban areas may allow that better schools be built in big cities, hence, facilitating formal education.

3. Preliminary methodology

Agglomeration models are used to assess levels of concentration and specialization of activities or sectors within the context of a region or sector.

Haddad (1977) uses measures of location and specialization to study employment in Brazil, classifying them as sectoral measures and specialization measures. Within this classification, he uses as sectoral measure the location quotient (LQ) and as specialization measure the specialization quotient (SQ).

Location Quotient (LQ)

$$LQ_{ij} = \frac{\frac{E_{ij}}{E_{*j}}}{\frac{E_{i*}}{E_{**}}}$$

Where:

$E_{ij} = employment\ in\ sector\ i\ of\ region\ j;$

$E_{*j} = employment\ in\ all\ sectors\ i\ of\ region\ j;$

$E_{i*} = employment\ in\ sector\ i\ of\ all\ regions;$

$E_{**} = employment\ in\ all\ sectors\ of\ all\ regions.$

Specialization Quotient (SQ)

$$SQ_{ij} = \frac{\sum_i (|iej - ie*|)}{2}$$

Where:

$$iej = \frac{E_{ij}}{\sum_i E_{ij}}; \quad jei = \frac{E_{ij}}{\sum_j E_{ij}}$$

For spatial concentration of an activity higher that the regional mean (LQ > 1) and for specialized knowledge equivalent to the regional mean (SQ → 0).

Lodder (1974), when discussing locational patterns and regional development, understands the agglomeration effect as the existence of a driving force unit capable of attracting other units that favor the settlement of the population and the development of complementary activities, such as the service activity force. From this effect, then, the concept of agglomeration economies arises, like the existence of a place that concentrates economic activity, complementary activities and services in general, with an efficient network of transport, communication and working force.

Ferreira (1996) analyses the network of cities in the State of Minas Gerais in Brazil from the perspective of relocation of São Paulo's industry. In this analysis, through the location quotient, he compares the performance of several sectors of industry, trade and services of many towns. He observes that when this quotient is used in the tertiary sector, it measures the need for services and trade in a region in comparison to the need in Brazil and, like in Haddad (1977), he describes the following model:

$$LQ = \frac{r/R}{br/BR}$$

Where ***r*** is sector *i* of location *j*; ***R*** is the sum of all sectors *i's* of location *j*; ***br*** is the sum of sector ***i*** of Brazil (or the largest area of reference); ***BR*** is the sum of all sectors of Brazil (or the largest area of reference).

In the methodology sector, both quotients, LQ and SQ, are adapted to measure the spatial concentration of performance and the level of knowledge of forensic accountants and of the forensic accounting activity in Brazil, by regional agglomeration and federation unit (FU).

4. Methodology

The methodology used is descriptive, not parametric, supported on the analyses of data from the exam and on sectoral indicators like the location quotient and the specialization quotient. These indicators define the levels of spatial concentration of performance and of knowledge equality/inequality of the applicants to the register of specialist in forensic accounting.

4.1 Model of location quotient (LQ)

LQ is obtained as described in Equation (1) and measures the level of specialization (i) by federation unit (FU) in Brazil. The numerator measures the level of specialization of the FU with respect to the region where the FU is located. The denominator measures the participation of the total amount of specializations in comparison to all specializations. An LQ > 1 means that the FU is more specialized than the region, the opposite being LQ < 1. The model is adapted from the work of Haddad (1977), Cruz et all. (2001) and Ferreira (1996), where each performance *status* is classified as specialization.

$$LQ_{i,j,r} = \frac{\frac{A_{i,j,r)}}{A_r}}{\frac{A_{i,j}}{A}} = \frac{A_{i,j,r)}}{A_r} * \left(\frac{A_{i,j}}{A}\right)^{-1} \qquad (1)$$

The quotient produced in Equation (1) creates a matrix LQ_{jxr} with ***j*** and ***r*** varying as follows:

$$\boldsymbol{LQ_{jxr}} = \begin{cases} j = 1,2,3,\ldots,27 \\ r = 1,2,\ldots,5 \end{cases} = \boldsymbol{A_{jr}} = \begin{bmatrix} \boldsymbol{A_{11}} & \cdots & \boldsymbol{A_{15}} \\ \vdots & \ddots & \vdots \\ \boldsymbol{A_{271}} & \cdots & \boldsymbol{A_{275}} \end{bmatrix}$$

Where:

$A_{i,j,r} = passing\ performance\ \boldsymbol{i}\ in\ FU\ \boldsymbol{j}\ of\ the\ region\ (r)$;

$A_r = passing\ performance\ \boldsymbol{i}\ in\ all\ FUs\ \boldsymbol{j}\ of\ the\ region\ (r)$;

$A_{i,j} = passing\ performance\ \boldsymbol{i}\ \ in\ all\ regions\ (r)$;

$A = \ total\ sum\ of\ performance\ statuses\ \boldsymbol{i}\ in\ Brazil$;

$i = performance\ status\ (passing\ e\ failing)$;

$j = FU$;

$r = geographic\ region$; and

$A = all\ performance\ statuses.$

4.2 Specialization Quotient (SQ)

SQ measures equality/inequality of knowledge ***i*** of region ***r*** with respect to knowledge ***i*** of all regions, as Equation (2) shows. The first term of the sum indicates the participation of knowledge ***i*** of FU ***j*** in region ***r***. the second term informs the participation of knowledge ***i*** in the total of knowledge.

$If\ SQ \to 0, the\ level\ of\ knowledge\ of\ the\ region\ gets\ closer\ to\ the\ general\ level.$

Otherwise,

$If\ SQ \to 1, the\ level\ of\ knowledge\ in\ the\ region\ gets\ distant\ from\ the\ general\ level.$

$$SQ_{i,j,r} = \frac{1}{2}\sum_{i}\left|\frac{E_{i,j,r)}}{E_r} - \frac{E_j}{E}\right| \qquad (2)$$

The quotients produced in Equation (2) create the matrix SQ_{jxr} with ***j*** and ***r*** varying as follows:

$$\boldsymbol{SQ_{27x5}} = \begin{cases} j = 1,2,3,\ldots,27 \\ r = 1,2,\ldots,5 \end{cases} = \boldsymbol{E_{jr}} \begin{bmatrix} \boldsymbol{E_{11}} & \cdots & \boldsymbol{E_{15}} \\ \vdots & \ddots & \vdots \\ \boldsymbol{E_{271}} & \cdots & \boldsymbol{E_{275}} \end{bmatrix}$$

The signals of spatial concentration of performance measured by the ***LQ*** and of level of specialized knowledge measured by ***SQ*** go in opposite directions. If the level of ***LQ*** is elevated, the level of ***SQ*** will be low, and vice versa, to show that a high concentration of performance implies in a high level of specialized knowledge.

4.3 LQ and SQ combination

LQ and SQ combination conveys, by region/FU, the level of spatial concentration of performance and of equality/inequality of specialized knowledge.

The matrix shown in Table 1 represents the indicators of location and specialization for all 27 FUs distributed in all 5 regions.

Table 1: combination of matrixes of location quotients and specialization quotients.

FU (j)	Regions (r)				
	1	2	3	4	5
1	$A_{11};E_{11}$	$A_{12};E_{12}$	$A_{13};E_{13}$	$A_{14};E_{14}$	$A_{15};E_{15}$
2	$A_{21};E_{21}$	$A_{22};E_{22}$	$A_{23};E_{23}$	$A_{24};E_{24}$	$A_{25};E_{25}$
3	$A_{31};E_{31}$	$A_{32};E_{32}$	$A_{33};E_{33}$	$A_{34};E_{34}$	$A_{35};E_{35}$
4	$A_{41};E_{41}$	$A_{42};E_{42}$	$A_{43};E_{43}$	$A_{44};E_{44}$	$A_{45};E_{45}$
...	...	...	...	...	...
...	...	...	...	...	...
27	$A_{271};E_{271}$	$A_{272};E_{272}$	$A_{273};E_{273}$	$A_{274};E_{274}$	$A_{275};E_{275}$

Source: the authors.

A = location quotient; E = specialization quotient.

In brief, without losing the general meaning, both matrixes combined could be represented as follows:

$$Signalizing\ of\ the\ matrixes: \begin{cases} A_{j,r} = \uparrow\downarrow \\ E_{j,r} = \downarrow\uparrow \end{cases};\ or\ if\ A_{j,r}\uparrow, E_{j,r}\downarrow;\ or\ if\ A_{j,r}\downarrow;\ E_{j,r}\uparrow$$

This inverse combination of direction of both matrixes shows that, if there is a concentration of performance, there is a higher level of specialized knowledge, as ***LQ*** being closer to one is a higher concentration of performance and ***SQ*** being closer to zero is a higher level of knowledge.

5. Description of data and analysis of results

This section presents the data and the results of the first technical qualification exam for forensic

accountants in Brazil. The analysis is performed through descriptive statistics, location quotient and specialization quotient as defined in equations (1) and (2) in the methodology section. The data are shown by number of enrolled candidates, federation unit and region. The exam was composed of two tests: a multiple-choice test and an essay test. The multiple-choice test assessed technical knowledge in specific topics and the essay one assessed the ability to communicate and convey ideas by writing parts of forensic reports. 60% is the passing score, which corresponds to 30 points in each test. APPENDIX 1 lists all candidates by performance.

5.1 Description of data

Tables 2 and 3 show the primary data, by federation unit and region, of the candidates' performance. The data in Table 2 display enrolled candidates' performance in three status: pass, fail and absent, by region and FU. The total number of candidates who enrolled in the exam to become part of the select group of experts was 745, but only 133 of those passed, which corresponds to 17.85% of the total. Among those who enrolled but did not pass, 402 failed the exam and 210 were absent, which corresponds to 53.96% and 28.19%, respectively.

Table 2: Performance status of candidates in the first technical qualification exam to create the national register of forensic accountants in Brazil by region and federation unit in 2017

Region/FU	ENR	PASS	FAIL	ABS	Region/FU	ENR	PASS	FAIL	ABS
Center-West	**86**	**17**	**40**	**29**	**Southeast**	**364**	**58**	**214**	**92**
DF	41	9	18	14	ES	20	3	9	8
GO	22	4	9	9	MG	50	5	28	17
MS	5	2	1	2	RJ	65	9	40	16
MT	18	2	12	4	SP	229	41	137	51
North	**41**	**6**	**18**	**17**	**Northeast**	**100**	**18**	**55**	**27**
AC	2	0	2	0	AL	8	1	6	1
AM	9	1	4	4	BA	21	5	8	8
AP	4	2	0	2	CE	14	2	8	4
PA	18	2	9	7	MA	7	3	3	1
RO	5	1	1	3	PB	5	0	2	3
RR	1	0	1	0	PE	27	4	17	6
TO	2	0	1	1	PI	6	0	5	1
South	**154**	**34**	**75**	**45**	RN	7	3	3	1
RS	52	9	27	16	SE	5	0	3	2
SC	44	11	19	14	**BRAZIL**	**745**	**133**	**402**	**210**
PR	58	14	29	15	**BRAZIL**	**1,00**	**0,1785**	**0,5396**	**0,2819**

Source: own work

ENR=enrolled candidates; **PASS**=passing performance status; **FAIL**=failing performance status; **ABS**=absent; **FU**=federation unit; **Region**=geographical region.

The data in Table 2 show that the Southeast region stands out from other regions with 48.86% (364/745*100) of the total of enrolled candidates. From those, only 15.93% (58/745*100) scored above the minimum required to pass the exam's tests, which corresponds to 43.61% (58/133*100) of the total number of approved candidates. As for the candidates that were not approved, 28.72% (214/745*100) failed and 12.35% (214/745*100) were absent.

Table 3 shows the performance of the approved candidates, by total of candidates, in the multiple-choice and in the essay tests. The small number of approved candidates (17.85%) and the weak performance in both tests suggest the need for a reflection on the efficacy of continuing education programs, considering that these candidates had been approved in the sufficiency exam, which has the purpose of attesting that those graduating in accounting sciences are competent to work as accounting professionals.

Table 3: Performance of passing candidates by test

Performance (score)	Candidates by test		Performance (score)	Candidates by test	
	Multiple-choice test	Essay test		Multiple-choice test	Essay test
30.0	9	34	36.0	8	4
30.5	0	18	37.0	13	6
31.0	21	11	37.5	0	2
31.5	0	8	38.0	7	3
32.0	19	4	39.0	8	1
32.5	0	5	39.5	0	3
33.0	10	6	40.0	8	3
33.5	0	5	41.0	1	0
34.0	12	8	43.0	1	0
34.5	0	6	45.0	1	0
35.0	13	4	46.0	1	1
35.5	0	1	48.0	1	0

Source: the authors

The data in Table 3 show that the modal performance in the essay test is 30 points, which is the minimum passing score, with a frequency of 34 candidates and which corresponds to 26% (34/133*100) of those approved. In the multiple-choice test, the modal performance is 31 points, with the frequency of 21 candidates, which is 15.79% (21/133*100) of those approved. The comparison of the performances ranging from 30 to 35 in the two tests shows that 82% of the candidates are in this range in the essay test, and 63%, in the multiple-choice test. This poor performance in both tests, but mainly in the essay test, which required writing parts of a forensic report, suggest the need for adequate continuing education programs to improve specialists' technical knowledge.

5.2 Descriptive statistics

Table 4 below shows descriptive statistics estimators by test for the performance of candidates who passed and who failed the exam. The absent candidates have not been considered for this analysis. As has already been stated in the previous section, the minimum score to pass the exam is 30 on a 50 point scale in each test.

Table 4: Descriptive statistics for the performance of the 535 candidates who passed and who failed in the first technical qualification exam to create the national register of forensic accountants in Brazil by region and federation unit in 2017

	Passing candidates scores			Failing candidates scores		
Estimators	**Multiple-choice test**	**Essay test**	**Exam final score**	**Multiple-choice test**	**Essay test**	**Exam final score**
Mean	34.67	32.70	67.38	27.10	3.99	31.10
Median	34	31.5	67	27	0	27
Mode	31	30	65	29	0	29
Standard deviation	3.60	3.06	4.78	5.01	8.42	12.32
Coeffcient of variation	0.10	0.09	0.07	0.18	2.10	0,4
p25	32	30	63.5	24	0	24
p75	37	34.5	70.5	30	0	30
min	30	30	60	11	0	11
max	48	46	80	44	29	66
Observations	133	133	133	402	402	402

Source: the authors

The performance of the approved candidates is between the *min/max* limits of 30 and 48 in the multiple-choice test, 30 and 46 in the essay test, and final score of 60 and 80. In the first quartile (25%), the performance was minimal, considering that the maximum score is 50 points. The scores in the last quartile (>p75) are between 37 and 48 points, in the multiple-choice test, and between 34.5 and 46 points, in the essay test. These limits suggest that the approved candidates need to strive to master the content of continuing education courses to mitigate the deficiencies evidenced by the exam results. For these candidates, the greatest score concentration, assessed by statistical mode, was 31 points in the multiple-choice test, with 21 candidates, 30 points in the essay test, as shown in Table 3.

Considering the candidates that failed, the greatest score concentration (statistical mode) was 29 points in the multiple-choice test and zero in the essay test. These results show that the level of knowledge and technical capacity of most of the candidates in the market is insufficient to meet professional working requirements.

The score spread presents minimal dispersion, as shown by the coefficient of variation. This score cohesion in each test with their respective mean is leveled down because of the poor performance of the candidates.

5.3 Spatial concentration of performance in the exam by region and federation unit

Table 5 below shows the concentration of passing and failing performances, by region and FU,

measured by the *Location Quotient (LQ)*, as modeled by Equation (1), demonstrated in the methodology section.

The model typifies a QL >1 as suggesting that the region or the **FU** has greater performance concentration.

Considering the passing performance, the South region, with an LQ=1.2547, presents greater concentration of passing candidates than the other regions, followed by the Center-West and North regions. The FUs with higher performance concentration are DF and SP. These results are in accordance with Haddad (1997).

Regarding the failing performance, the region with higher concentration is the Southeast, followed by the Northeast, and the FU with higher concentration is SP, followed by PA.

However, the number of enrolled candidates needs to be considered in order to understand fully the region/FU performance status with a QL showing greater or smaller concentration. For example, the **FU** PA had 18 enrolled candidates, while DF and SP had 41 and 229, respectively.

Table 5: Location Quotient (LQ) of the performance of regions/FUs

REGION/FU	LQpass	LQfail	REGION/FU	LQpass	LQfail
Center-West	**1,1997**	**0,9339**	**Southeast**	**0,8578**	**1,0471**
DF	0,6351	0,4203	ES	0,0444	0,0440
GO	0,2823	0,2101	MG	0,0739	0,1370
MS	0,1411	0,0233	RJ	0,1331	0,1957
MT	0,1411	0,2802	SP	0,6063	0,6703
North	**1,0056**	**0,9981**	**Northeast**	**0,9919**	**1,0027**
AC	-	0,1109	AL	0,0551	0,1094
AM	0,1676	0,2218	BA	0,2755	0,1458
AP	0,3352	-	CE	0,1102	0,1458
PA	0,3352	0,4991	MA	0,1653	0,0547
RO	0,1676	0,0555	PB	-	0,0365
RR	-	0,0555	PE	0,2204	0,3099
TO	-	0,0555	PI	-	0,0912
South	**1,2547**	**0,9157**	RN	0,1653	0,0547
RS	0,3321	0,3297	SE	-	0,0547
SC	0,4059	0,2320	**BRAZIL**	0,2486	0,7514
PR	0,5167	0,3541			

Source: the author.

LQpass=passing performance location quotient; **LQfail**=failing performance location quotient; **FU**=federation unit; **Region**=geographical region.

The results in Table 5 also show that in 6 of the 27 FUs (22.2%) no candidate passed the exam, and that in 3 FUs (11.1%) the passing performance is smaller than 0.06, which is a low performance concentration.

5.4 Level of specialized knowledge by region/FU

Table 6 below shows the level of knowledge in forensic accounting measured by the specialization quotient (***CS***), by region and FU, for the passing and failing performance statuses. The coefficient, as defined by the model demonstrated in Equation (2), typifies that ***CS*** tending to 1 (CS→1) conveys that the level of knowledge is farther from the region mean; when ***CS*** tends to zero (CS→0), the interpretation is the opposite, i.e., the level of knowledge is closer to that of the region.

Confirming the model, with respect to the passing performance status, the **FU** that is closer to the regional mean is DF, followed by SP, both with ***CS*** below 0.05. In relation to the geographical regions, those showing levels of knowledge closer to this mean are the South and the Center-West, with ***CS*** 0.2169 and 0.3481, respectively. These results confirm Haddad (1977). Regarding the failing performance status, the region and the **FU** that are farther from the mean are the Northeast, with ***CS > 3***, and MS, with ***CS 0.3669***.

Table 6: Specialization quotient by region and FU for passing and failing performances

REGION/FU	CSpass	CSfail	REGION/FU	CSpass	CSfail
Center-West	**0,3481**	**1,1519**	**Southeast**	**0,3906**	**1,1094**
DF	0,0454	0,2178	ES	0,1188	0,3592
GO	0,0892	0,2968	MG	0,1151	0,3242
MS	0,1068	0,3669	RJ	0,1078	0,3022
MT	0,1068	0,2704	SP	0,0489	0,1239
North	**0,7451**	**2,2549**	**Northeast**	**0,9954**	**3,0046**
AC	0,1243	0,3340	AL	0,1174	0,3346
AM	0,1035	0,2924	BA	0,0901	0,3209
AP	0,0826	0,3757	CE	0,1106	0,3209
PA	0,0826	0,1882	MA	0,1038	0,3552
RO	0,1035	0,3549	PB	0,1243	0,3620
RR	0,1243	0,3549	PE	0,0969	0,2593
TO	0,1243	0,3549	PI	0,1243	0,3415
South	**0,2169**	**0,7831**	RN	0,1038	0,3552
RS	0,0830	0,2518	SE	0,1243	0,3552
SC	0,0738	0,2885	**BRAZIL**	**0,1243**	**0,3757**
PR	0,0601	0,2427			

Source: the authors.

CSpass= passing performance specialization quotient; **CSfail**= failing performance specialization quotient; **FU**=federation unit; **Region**=geographical region.

The results displayed in Table 6 support, conclusively, that the FUs with lower inequality in level of knowledge, considering passing and failing performance statuses, are still far from the regional mean and, therefore, still far from zero. However, it is possible to reason that this inequality is also a result of the high proportion of absent candidates, as shown in Table 1.

5.5 Spatial concentration of performance and specialization by region and FU

Table 7 compares the levels of performance and specialization concentration, as measured by ***LQ*** and ***CS***, respectively. The data used in this comparison were sourced from Tables 4 and 5 above.

The horizontal comparison of these data reveal that the performance concentration moves in the opposite direction to the level of specialized knowledge. Thus, a high ***LQpass*** affects a low ***CSpass*** or a high ***LQfail*** affects a low ***CSfail*** and vice versa. However, the direction of this move was expected because a high concentration of performance conveys a high level of knowledge, as defined in subsection 4.2 above.

Table 7: Comparative demonstration of performance concentration with the level of specialized knowledge

REGION/FU	LQpass	LQfail	CSpass	CSfail	REGION/FU	LQpass	LQfail	CSpass	CSfail
Center-West	**1,200**	**0,934**	**0,348**	**1,152**	**Southeast**	**0,858**	**1,047**	**0,391**	**1,109**
DF	0,635	0,420	0,045	0,218	ES	0,044	0,044	0,119	0,359
GO	0,282	0,210	0,089	0,297	MG	0,074	0,137	0,115	0,324
MS	0,141	0,023	0,107	0,367	RJ	0,133	0,196	0,108	0,302
MT	0,141	0,280	0,107	0,270	SP	0,606	0,670	0,049	0,124
North	**1,006**	**0,887**	**0,745**	**2,255**	**Northeast**	**0,992**	**1,003**	**0,995**	**3,005**
AC	-	0,111	0,124	0,334	AL	0,055	0,109	0,117	0,335
AM	0,168	0,222	0,103	0,292	BA	0,276	0,146	0,090	0,321
AP	0,335	-	0,083	0,376	CE	0,110	0,146	0,111	0,321
PA	0,335	0,499	0,083	0,188	MA	0,165	0,055	0,104	0,355
RO	0,168	0,055	0,103	0,355	PB	-	0,036	0,124	0,362
RR	-	0,055	0,124	0,355	PE	0,220	0,310	0,097	0,259
TO	-	0,055	0,124	0,355	PI	-	0,091	0,124	0,341
South	**1,255**	**0,916**	**0,217**	**0,783**	RN	0,165	0,055	0,104	0,355
RS	0,332	0,330	0,083	0,252	SE	-	0,055	0,124	0,355
SC	0,406	0,232	0,074	0,289	**BRAZIL**	**0,249**	**0,751**	**0,124**	**0,376**
PR	0,517	0,354	0,060	0,243					

Source: the authors.

LQpass=passing performance location quotient; **LQfail**=failing performance location quotient; **CSpass**= passing performance specialization quotient; **CSfail**= failing performance specialization quotient; **FU**=federation unit; **Region**=geographical region

In summary, the performance concentration index measured by ***LQ*** and the level of knowledge index measured by ***SQ*** are inversely complementary and this confirms these indexes' theory that dictates that the higher the performance concentration, the higher the level of specialized knowledge.

In this context, the evidence obtained by applying the model shows that the South region has the highest concentration of performance and simultaneously the highest level in specialized knowledge. The ***FU*** that presents both these attributes is ***DF***. At first, these results contradict the expectations of this research because the Southeast ***region*** and the ***FU*** SP are the most developed ones in Brazil and, therefore, this ***region*** and this ***FU*** were expected to have the highest concentration of performance and the highest level of specialization, nevertheless the results are in accordance with Glaeser (1999).

6. Conclusion

This article presented the results of the research on the first technical qualification exam for the creation of the National Register of Forensic Accountants (NRFA or CNPC, acronym in acronym in Portuguese) conducted by the Brazilian Federal Council of Accounting (BFCA or CFC, acronym in Portuguese) in 2017. These results were drawn based on the performance of candidates that answered multiple-choice and essay questions in the exam. The research problem requires identifying, by ***region*** and ***FU***, levels of spatial concentration of performance and of specialized knowledge. The main evidences revealed by the research are summarized below:

(a) from the total of enrolled candidates, 28.19% were absent from the exam; the score of 53.96% was lower than the minimum required for approval in one or in both tests; and only 17.85% were approved in the exam by obtaining the minimum passing score; in 6 of the 27 FUs (22.2%) no one was approved; and in 3 (11.1%) the performance concentration of the approved candidates was lower than 0.10, which suggests the need for special attention to the syllabus of continuing education programs;

(b) the South region has the greatest concentration of the passing performance status with an ***LQ*** >1.2 and is also the most specialized with a level of knowledge of 0.22, in which it is followed by the Center-West and Southeast regions, with 0.35 and 0.39, respectively;

(c) the North region presents the lowest loss of performance with an ***LQ*** of 0.89, and the South region presents the lowest level of knowledge inequality with a ***SQ*** of 0.78;

(d) the spatial concentration of the level of knowledge measured by ***LQ*** and the specialized knowledge measured by ***SQ*** act as inversely complementary given that a high ***LQ*** implies a low ***SQ***, as dictated by the theory. This behavior conveys that high performance corresponds to a high level of knowledge;

(e) the candidates' performance in the essay test was 19% worse than that of the multiple-choice test. The score 30 in the essay test was the most frequent, occurring 34 times; in the multiple-choice test, the score 31 occurred 21 times and was the most frequent.

(f) in addition to the important conclusion that the performance in the exam was low, in a point scale from 0 to 50, with 30 as the minimum passing grade in each of the tests, multiple-choice and essay, most approved candidates had the lowest passing scores in both tests.

The findings of this research are robust and call to a reflection on the effectiveness of continuing education and on the comprehensiveness of the sufficiency exam given the low degree of approval in the qualification exam. On the other hand, the findings are bound to stimulate further research on the level of knowledge of accountants in other specialties required by the BFCA to offer qualified services to society. However, it must also be considered that the data comprise a single exam and therefore the results are isolated and must not be generalized.

References

Cooke, Phil; Leydesdorff, Loet. (2006). Regional Development in the Knowledge-Based Economy: The construction of advantage. Journal of Technology Transfer, v. 31, nr. 1. p. 5-15.

Cruz, Bruno de Oliveira et al. (2011). Economia Regional e Urbana. Brasilia. IPEA.

Ferreira, Mauro Sayar. (1996). Rede de cidades em Minas Gerais a partir da realocação da indústria paulista, nr. especial.

Field, John. (2001). Lifelong education. International Journal of Lifelong Education, v. 20, nr. 1/2, jan/apr.

Glaeser, Edward L. (1999). Learning in cities. Journal of Urban Economics, v. 46, nr. 2, Sep, p. 254-277.

Haddad, Paulo Roberto. (1977). Padrões regionais de crescimento do emprego industrial de 1950 a 1970. Rev.Bras.Geog. v. 39, nr.1. jan/mar.

Isard, Walter; Schooler, Eugene W.; Vietorisz, Thomas. (1959).Industrial Complex Analysis and Regional Development: A case Study of Refinery-Petrochemical-Synthetic-Fiber Complexes and Puerto Rico.M.I.T.Press.

Lodder, Celsius Antonio. (1974). Padrões locacionais e desenvolvimento regional. Rev.Bras.Econ.v.28, nr. 1. jan/mar.

Lundvall, Bengt-Ake (2004). The Economics of Knowledge And Learning. Research on Technological Innvation, Management and Policy, v.8, pp.21-42. http://www.emeraldinsight.com/doi/pdfplus/10.1016/S0737-1071%2804%29080002-3.

Lundvall, Bengt-Ake and Johnson, Bjorn (1994). The Learning Economy. Journal of Industry Studies, v.I, nr.2.

OECD (1981). The measurement of scientific and technical activities. (Frascati manual, 1980).

Appendix

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
1	35,00	30,00	65,00	SUCCESSFUL
2	38,00	34,00	72,00	SUCCESSFUL
3	32,00	34,50	66,50	SUCCESSFUL
4	31,00	30,00	61,00	SUCCESSFUL
5	34,00	46,00	80,00	SUCCESSFUL
6	33,00	30,50	63,50	SUCCESSFUL
7	37,00	40,00	77,00	SUCCESSFUL
8	40,00	30,00	70,00	SUCCESSFUL
9	40,00	30,50	70,50	SUCCESSFUL
10	35,00	31,50	66,50	SUCCESSFUL
11	33,00	30,50	63,50	SUCCESSFUL
12	37,00	30,00	67,00	SUCCESSFUL
13	30,00	31,00	61,00	SUCCESSFUL
14	37,00	31,00	68,00	SUCCESSFUL
15	30,00	34,00	64,00	SUCCESSFUL
16	40,00	30,00	70,00	SUCCESSFUL
17	35,00	31,50	66,50	SUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
18	32,00	36,50	68,50	SUCCESSFUL
19	35,00	35,00	70,00	SUCCESSFUL
20	30,00	30,00	60,00	SUCCESSFUL
21	30,00	30,00	60,00	SUCCESSFUL
22	33,00	30,00	63,00	SUCCESSFUL
23	37,00	30,50	67,50	SUCCESSFUL
24	31,00	30,50	61,50	SUCCESSFUL
25	35,00	33,00	68,00	SUCCESSFUL
26	36,00	33,50	69,50	SUCCESSFUL
27	34,00	36,50	70,50	SUCCESSFUL
28	48,00	30,00	78,00	SUCCESSFUL
29	37,00	33,00	70,00	SUCCESSFUL
30	31,00	37,50	68,50	SUCCESSFUL
31	31,00	32,50	63,50	SUCCESSFUL
32	31,00	32,50	63,50	SUCCESSFUL
33	40,00	31,50	71,50	SUCCESSFUL
34	31,00	30,50	61,50	SUCCESSFUL
35	38,00	35,00	73,00	SUCCESSFUL
36	39,00	33,00	72,00	SUCCESSFUL
37	32,00	31,50	63,50	SUCCESSFUL
38	31,00	31,00	62,00	SUCCESSFUL
39	39,00	31,50	70,50	SUCCESSFUL
40	37,00	30,00	67,00	SUCCESSFUL
41	33,00	34,50	67,50	SUCCESSFUL
42	35,00	30,00	65,00	SUCCESSFUL
43	34,00	37,00	71,00	SUCCESSFUL
44	40,00	30,50	70,50	SUCCESSFUL
45	31,00	39,00	70,00	SUCCESSFUL
46	34,00	30,00	64,00	SUCCESSFUL
47	38,00	38,00	76,00	SUCCESSFUL
48	35,00	31,00	66,00	SUCCESSFUL
49	30,00	30,00	60,00	SUCCESSFUL
50	36,00	40,00	76,00	SUCCESSFUL
51	32,00	30,00	62,00	SUCCESSFUL
52	41,00	30,50	71,50	SUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
53	45,00	30,50	75,50	SUCCESSFUL
54	46,00	31,50	77,50	SUCCESSFUL
55	39,00	31,50	70,50	SUCCESSFUL
56	32,00	39,50	71,50	SUCCESSFUL
57	30,00	34,00	64,00	SUCCESSFUL
58	33,00	31,00	64,00	SUCCESSFUL
59	32,00	31,50	63,50	SUCCESSFUL
60	39,00	37,00	76,00	SUCCESSFUL
61	36,00	32,50	68,50	SUCCESSFUL
62	37,00	36,00	73,00	SUCCESSFUL
63	32,00	32,00	64,00	SUCCESSFUL
64	37,00	33,50	70,50	SUCCESSFUL
65	34,00	30,00	64,00	SUCCESSFUL
66	30,00	30,00	60,00	SUCCESSFUL
67	35,00	30,00	65,00	SUCCESSFUL
68	35,00	34,00	69,00	SUCCESSFUL
69	31,00	30,00	61,00	SUCCESSFUL
70	36,00	40,00	76,00	SUCCESSFUL
71	32,00	30,00	62,00	SUCCESSFUL
72	32,00	35,50	67,50	SUCCESSFUL
73	34,00	32,00	66,00	SUCCESSFUL
74	33,00	35,00	68,00	SUCCESSFUL
75	33,00	30,00	63,00	SUCCESSFUL
76	30,00	36,50	66,50	SUCCESSFUL
77	32,00	30,50	62,50	SUCCESSFUL
78	38,00	34,50	72,50	SUCCESSFUL
79	30,00	30,50	60,50	SUCCESSFUL
80	39,00	37,00	76,00	SUCCESSFUL
81	34,00	30,50	64,50	SUCCESSFUL
82	37,00	30,00	67,00	SUCCESSFUL
83	32,00	31,00	63,00	SUCCESSFUL
84	32,00	39,50	71,50	SUCCESSFUL
85	31,00	30,00	61,00	SUCCESSFUL
86	31,00	31,00	62,00	SUCCESSFUL
87	31,00	34,00	65,00	SUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
88	39,00	33,50	72,50	SUCCESSFUL
89	31,00	36,00	67,00	SUCCESSFUL
90	33,00	30,00	63,00	SUCCESSFUL
91	32,00	33,00	65,00	SUCCESSFUL
92	37,00	30,00	67,00	SUCCESSFUL
93	39,00	32,50	71,50	SUCCESSFUL
94	35,00	30,00	65,00	SUCCESSFUL
95	40,00	33,50	73,50	SUCCESSFUL
96	37,00	34,50	71,50	SUCCESSFUL
97	31,00	30,00	61,00	SUCCESSFUL
98	31,00	32,00	63,00	SUCCESSFUL
99	36,00	32,50	68,50	SUCCESSFUL
100	32,00	34,00	66,00	SUCCESSFUL
101	38,00	30,00	68,00	SUCCESSFUL
102	32,00	33,00	65,00	SUCCESSFUL
103	37,00	35,00	72,00	SUCCESSFUL
104	36,00	31,00	67,00	SUCCESSFUL
105	37,00	30,00	67,00	SUCCESSFUL
106	36,00	37,50	73,50	SUCCESSFUL
107	34,00	30,50	64,50	SUCCESSFUL
108	34,00	34,00	68,00	SUCCESSFUL
109	31,00	30,50	61,50	SUCCESSFUL
110	31,00	30,00	61,00	SUCCESSFUL
111	31,00	34,50	65,50	SUCCESSFUL
112	32,00	39,50	71,50	SUCCESSFUL
113	34,00	30,50	64,50	SUCCESSFUL
114	34,00	38,00	72,00	SUCCESSFUL
115	32,00	34,00	66,00	SUCCESSFUL
116	32,00	32,00	64,00	SUCCESSFUL
117	35,00	30,00	65,00	SUCCESSFUL
118	36,00	34,50	70,50	SUCCESSFUL
119	33,00	30,00	63,00	SUCCESSFUL
120	38,00	36,00	74,00	SUCCESSFUL
121	31,00	31,00	62,00	SUCCESSFUL
122	39,00	31,00	70,00	SUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
123	31,00	30,00	61,00	SUCCESSFUL
124	40,00	30,50	70,50	SUCCESSFUL
125	35,00	30,00	65,00	SUCCESSFUL
126	40,00	38,00	78,00	SUCCESSFUL
127	33,00	33,00	66,00	SUCCESSFUL
128	34,00	30,00	64,00	SUCCESSFUL
129	31,00	31,00	62,00	SUCCESSFUL
130	43,00	36,00	79,00	SUCCESSFUL
131	35,00	30,50	65,50	SUCCESSFUL
132	38,00	33,50	71,50	SUCCESSFUL
133	32,00	30,50	62,50	SUCCESSFUL
134	0,00	0,00	0,00	ABSENT
135	0,00	0,00	0,00	ABSENT
136	0,00	0,00	0,00	ABSENT
137	0,00	0,00	0,00	ABSENT
138	0,00	0,00	0,00	ABSENT
139	0,00	0,00	0,00	ABSENT
140	0,00	0,00	0,00	ABSENT
141	0,00	0,00	0,00	ABSENT
142	0,00	0,00	0,00	ABSENT
143	0,00	0,00	0,00	ABSENT
144	0,00	0,00	0,00	ABSENT
145	0,00	0,00	0,00	ABSENT
146	0,00	0,00	0,00	ABSENT
147	0,00	0,00	0,00	ABSENT
148	0,00	0,00	0,00	ABSENT
149	0,00	0,00	0,00	ABSENT
150	0,00	0,00	0,00	ABSENT
151	0,00	0,00	0,00	ABSENT
152	0,00	0,00	0,00	ABSENT
153	0,00	0,00	0,00	ABSENT
154	0,00	0,00	0,00	ABSENT
155	0,00	0,00	0,00	ABSENT
156	0,00	0,00	0,00	ABSENT
157	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
158	0,00	0,00	0,00	ABSENT
159	0,00	0,00	0,00	ABSENT
160	0,00	0,00	0,00	ABSENT
161	0,00	0,00	0,00	ABSENT
162	0,00	0,00	0,00	ABSENT
163	0,00	0,00	0,00	ABSENT
164	0,00	0,00	0,00	ABSENT
165	0,00	0,00	0,00	ABSENT
166	0,00	0,00	0,00	ABSENT
167	0,00	0,00	0,00	ABSENT
168	0,00	0,00	0,00	ABSENT
169	0,00	0,00	0,00	ABSENT
170	0,00	0,00	0,00	ABSENT
171	0,00	0,00	0,00	ABSENT
172	0,00	0,00	0,00	ABSENT
173	0,00	0,00	0,00	ABSENT
174	0,00	0,00	0,00	ABSENT
175	0,00	0,00	0,00	ABSENT
176	0,00	0,00	0,00	ABSENT
177	0,00	0,00	0,00	ABSENT
178	0,00	0,00	0,00	ABSENT
179	0,00	0,00	0,00	ABSENT
180	0,00	0,00	0,00	ABSENT
181	0,00	0,00	0,00	ABSENT
182	0,00	0,00	0,00	ABSENT
183	0,00	0,00	0,00	ABSENT
184	0,00	0,00	0,00	ABSENT
185	0,00	0,00	0,00	ABSENT
186	0,00	0,00	0,00	ABSENT
187	0,00	0,00	0,00	ABSENT
188	0,00	0,00	0,00	ABSENT
189	0,00	0,00	0,00	ABSENT
190	0,00	0,00	0,00	ABSENT
191	0,00	0,00	0,00	ABSENT
192	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
193	0,00	0,00	0,00	ABSENT
194	0,00	0,00	0,00	ABSENT
195	0,00	0,00	0,00	ABSENT
196	0,00	0,00	0,00	ABSENT
197	0,00	0,00	0,00	ABSENT
198	0,00	0,00	0,00	ABSENT
199	0,00	0,00	0,00	ABSENT
200	0,00	0,00	0,00	ABSENT
201	0,00	0,00	0,00	ABSENT
202	0,00	0,00	0,00	ABSENT
203	0,00	0,00	0,00	ABSENT
204	0,00	0,00	0,00	ABSENT
205	0,00	0,00	0,00	ABSENT
206	0,00	0,00	0,00	ABSENT
207	0,00	0,00	0,00	ABSENT
208	0,00	0,00	0,00	ABSENT
209	0,00	0,00	0,00	ABSENT
210	0,00	0,00	0,00	ABSENT
211	0,00	0,00	0,00	ABSENT
212	0,00	0,00	0,00	ABSENT
213	0,00	0,00	0,00	ABSENT
214	0,00	0,00	0,00	ABSENT
215	0,00	0,00	0,00	ABSENT
216	0,00	0,00	0,00	ABSENT
217	0,00	0,00	0,00	ABSENT
218	0,00	0,00	0,00	ABSENT
219	0,00	0,00	0,00	ABSENT
220	0,00	0,00	0,00	ABSENT
221	0,00	0,00	0,00	ABSENT
222	0,00	0,00	0,00	ABSENT
223	0,00	0,00	0,00	ABSENT
224	0,00	0,00	0,00	ABSENT
225	0,00	0,00	0,00	ABSENT
226	0,00	0,00	0,00	ABSENT
227	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
228	0,00	0,00	0,00	ABSENT
229	0,00	0,00	0,00	ABSENT
230	0,00	0,00	0,00	ABSENT
231	0,00	0,00	0,00	ABSENT
232	0,00	0,00	0,00	ABSENT
233	0,00	0,00	0,00	ABSENT
234	0,00	0,00	0,00	ABSENT
235	0,00	0,00	0,00	ABSENT
236	0,00	0,00	0,00	ABSENT
237	0,00	0,00	0,00	ABSENT
238	0,00	0,00	0,00	ABSENT
239	0,00	0,00	0,00	ABSENT
240	0,00	0,00	0,00	ABSENT
241	0,00	0,00	0,00	ABSENT
242	0,00	0,00	0,00	ABSENT
243	0,00	0,00	0,00	ABSENT
244	0,00	0,00	0,00	ABSENT
245	0,00	0,00	0,00	ABSENT
246	0,00	0,00	0,00	ABSENT
247	0,00	0,00	0,00	ABSENT
248	0,00	0,00	0,00	ABSENT
249	0,00	0,00	0,00	ABSENT
250	0,00	0,00	0,00	ABSENT
251	0,00	0,00	0,00	ABSENT
252	0,00	0,00	0,00	ABSENT
253	0,00	0,00	0,00	ABSENT
254	0,00	0,00	0,00	ABSENT
255	0,00	0,00	0,00	ABSENT
256	0,00	0,00	0,00	ABSENT
257	0,00	0,00	0,00	ABSENT
258	0,00	0,00	0,00	ABSENT
259	0,00	0,00	0,00	ABSENT
260	0,00	0,00	0,00	ABSENT
261	0,00	0,00	0,00	ABSENT
262	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
263	0,00	0,00	0,00	ABSENT
264	0,00	0,00	0,00	ABSENT
265	0,00	0,00	0,00	ABSENT
266	0,00	0,00	0,00	ABSENT
267	0,00	0,00	0,00	ABSENT
268	0,00	0,00	0,00	ABSENT
269	0,00	0,00	0,00	ABSENT
270	0,00	0,00	0,00	ABSENT
271	0,00	0,00	0,00	ABSENT
272	0,00	0,00	0,00	ABSENT
273	0,00	0,00	0,00	ABSENT
274	0,00	0,00	0,00	ABSENT
275	0,00	0,00	0,00	ABSENT
276	0,00	0,00	0,00	ABSENT
277	0,00	0,00	0,00	ABSENT
278	0,00	0,00	0,00	ABSENT
279	0,00	0,00	0,00	ABSENT
280	0,00	0,00	0,00	ABSENT
281	0,00	0,00	0,00	ABSENT
282	0,00	0,00	0,00	ABSENT
283	0,00	0,00	0,00	ABSENT
284	0,00	0,00	0,00	ABSENT
285	0,00	0,00	0,00	ABSENT
286	0,00	0,00	0,00	ABSENT
287	0,00	0,00	0,00	ABSENT
288	0,00	0,00	0,00	ABSENT
289	0,00	0,00	0,00	ABSENT
290	0,00	0,00	0,00	ABSENT
291	0,00	0,00	0,00	ABSENT
292	0,00	0,00	0,00	ABSENT
293	0,00	0,00	0,00	ABSENT
294	0,00	0,00	0,00	ABSENT
295	0,00	0,00	0,00	ABSENT
296	0,00	0,00	0,00	ABSENT
297	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
298	0,00	0,00	0,00	ABSENT
299	0,00	0,00	0,00	ABSENT
300	0,00	0,00	0,00	ABSENT
301	0,00	0,00	0,00	ABSENT
302	0,00	0,00	0,00	ABSENT
303	0,00	0,00	0,00	ABSENT
304	0,00	0,00	0,00	ABSENT
305	0,00	0,00	0,00	ABSENT
306	0,00	0,00	0,00	ABSENT
307	0,00	0,00	0,00	ABSENT
308	0,00	0,00	0,00	ABSENT
309	0,00	0,00	0,00	ABSENT
310	0,00	0,00	0,00	ABSENT
311	0,00	0,00	0,00	ABSENT
312	0,00	0,00	0,00	ABSENT
313	0,00	0,00	0,00	ABSENT
314	0,00	0,00	0,00	ABSENT
315	0,00	0,00	0,00	ABSENT
316	0,00	0,00	0,00	ABSENT
317	0,00	0,00	0,00	ABSENT
318	0,00	0,00	0,00	ABSENT
319	0,00	0,00	0,00	ABSENT
320	0,00	0,00	0,00	ABSENT
321	0,00	0,00	0,00	ABSENT
322	0,00	0,00	0,00	ABSENT
323	0,00	0,00	0,00	ABSENT
324	0,00	0,00	0,00	ABSENT
325	0,00	0,00	0,00	ABSENT
326	0,00	0,00	0,00	ABSENT
327	0,00	0,00	0,00	ABSENT
328	0,00	0,00	0,00	ABSENT
329	0,00	0,00	0,00	ABSENT
330	0,00	0,00	0,00	ABSENT
331	0,00	0,00	0,00	ABSENT
332	0,00	0,00	0,00	ABSENT

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
333	0,00	0,00	0,00	ABSENT
334	0,00	0,00	0,00	ABSENT
335	0,00	0,00	0,00	ABSENT
336	0,00	0,00	0,00	ABSENT
337	0,00	0,00	0,00	ABSENT
338	0,00	0,00	0,00	ABSENT
339	0,00	0,00	0,00	ABSENT
340	0,00	0,00	0,00	ABSENT
341	0,00	0,00	0,00	ABSENT
342	0,00	0,00	0,00	ABSENT
343	0,00	0,00	0,00	ABSENT
344	34,00	25,50	59,50	UNSUCCESSFUL
345	25,00	0,00	25,00	UNSUCCESSFUL
346	25,00	0,00	25,00	UNSUCCESSFUL
347	17,00	0,00	17,00	UNSUCCESSFUL
348	31,00	18,00	49,00	UNSUCCESSFUL
349	25,00	0,00	25,00	UNSUCCESSFUL
350	25,00	0,00	25,00	UNSUCCESSFUL
351	25,00	0,00	25,00	UNSUCCESSFUL
352	29,00	0,00	29,00	UNSUCCESSFUL
353	31,00	0,00	31,00	UNSUCCESSFUL
354	34,00	22,00	56,00	UNSUCCESSFUL
355	33,00	25,50	58,50	UNSUCCESSFUL
356	15,00	0,00	15,00	UNSUCCESSFUL
357	30,00	0,00	30,00	UNSUCCESSFUL
358	31,00	0,00	31,00	UNSUCCESSFUL
359	30,00	20,50	50,50	UNSUCCESSFUL
360	31,00	4,00	35,00	UNSUCCESSFUL
361	24,00	0,00	24,00	UNSUCCESSFUL
362	28,00	0,00	28,00	UNSUCCESSFUL
363	20,00	0,00	20,00	UNSUCCESSFUL
364	24,00	0,00	24,00	UNSUCCESSFUL
365	24,00	0,00	24,00	UNSUCCESSFUL
366	27,00	0,00	27,00	UNSUCCESSFUL
367	27,00	0,00	27,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
368	23,00	0,00	23,00	UNSUCCESSFUL
369	20,00	0,00	20,00	UNSUCCESSFUL
370	41,00	21,00	62,00	UNSUCCESSFUL
371	28,00	0,00	28,00	UNSUCCESSFUL
372	18,00	0,00	18,00	UNSUCCESSFUL
373	31,00	13,50	44,50	UNSUCCESSFUL
374	30,00	0,00	30,00	UNSUCCESSFUL
375	28,00	0,00	28,00	UNSUCCESSFUL
376	23,00	0,00	23,00	UNSUCCESSFUL
377	27,00	0,00	27,00	UNSUCCESSFUL
378	28,00	0,00	28,00	UNSUCCESSFUL
379	22,00	0,00	22,00	UNSUCCESSFUL
380	27,00	0,00	27,00	UNSUCCESSFUL
381	27,00	0,00	27,00	UNSUCCESSFUL
382	24,00	0,00	24,00	UNSUCCESSFUL
383	22,00	0,00	22,00	UNSUCCESSFUL
384	16,00	0,00	16,00	UNSUCCESSFUL
385	30,00	0,00	30,00	UNSUCCESSFUL
386	27,00	0,00	27,00	UNSUCCESSFUL
387	29,00	0,00	29,00	UNSUCCESSFUL
388	28,00	0,00	28,00	UNSUCCESSFUL
389	28,00	0,00	28,00	UNSUCCESSFUL
390	23,00	0,00	23,00	UNSUCCESSFUL
391	23,00	0,00	23,00	UNSUCCESSFUL
392	26,00	0,00	26,00	UNSUCCESSFUL
393	28,00	0,00	28,00	UNSUCCESSFUL
394	33,00	9,00	42,00	UNSUCCESSFUL
395	30,00	0,00	30,00	UNSUCCESSFUL
396	15,00	0,00	15,00	UNSUCCESSFUL
397	24,00	0,00	24,00	UNSUCCESSFUL
398	31,00	25,00	56,00	UNSUCCESSFUL
399	24,00	0,00	24,00	UNSUCCESSFUL
400	26,00	0,00	26,00	UNSUCCESSFUL
401	31,00	22,50	53,50	UNSUCCESSFUL
402	27,00	0,00	27,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
403	24,00	0,00	24,00	UNSUCCESSFUL
404	29,00	0,00	29,00	UNSUCCESSFUL
405	29,00	0,00	29,00	UNSUCCESSFUL
406	23,00	0,00	23,00	UNSUCCESSFUL
407	26,00	0,00	26,00	UNSUCCESSFUL
408	23,00	0,00	23,00	UNSUCCESSFUL
409	24,00	0,00	24,00	UNSUCCESSFUL
410	26,00	0,00	26,00	UNSUCCESSFUL
411	21,00	0,00	21,00	UNSUCCESSFUL
412	24,00	0,00	24,00	UNSUCCESSFUL
413	30,00	0,00	30,00	UNSUCCESSFUL
414	16,00	0,00	16,00	UNSUCCESSFUL
415	28,00	0,00	28,00	UNSUCCESSFUL
416	24,00	0,00	24,00	UNSUCCESSFUL
417	34,00	28,50	62,50	UNSUCCESSFUL
418	24,00	0,00	24,00	UNSUCCESSFUL
419	29,00	0,00	29,00	UNSUCCESSFUL
420	29,00	0,00	29,00	UNSUCCESSFUL
421	26,00	0,00	26,00	UNSUCCESSFUL
422	27,00	0,00	27,00	UNSUCCESSFUL
423	30,00	0,00	30,00	UNSUCCESSFUL
424	40,00	16,00	56,00	UNSUCCESSFUL
425	27,00	0,00	27,00	UNSUCCESSFUL
426	22,00	0,00	22,00	UNSUCCESSFUL
427	24,00	0,00	24,00	UNSUCCESSFUL
428	29,00	0,00	29,00	UNSUCCESSFUL
429	27,00	0,00	27,00	UNSUCCESSFUL
430	27,00	0,00	27,00	UNSUCCESSFUL
431	29,00	0,00	29,00	UNSUCCESSFUL
432	27,00	0,00	27,00	UNSUCCESSFUL
433	32,00	23,50	55,50	UNSUCCESSFUL
434	25,00	0,00	25,00	UNSUCCESSFUL
435	16,00	0,00	16,00	UNSUCCESSFUL
436	27,00	0,00	27,00	UNSUCCESSFUL
437	27,00	0,00	27,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
438	30,00	18,00	48,00	UNSUCCESSFUL
439	26,00	0,00	26,00	UNSUCCESSFUL
440	20,00	0,00	20,00	UNSUCCESSFUL
441	25,00	0,00	25,00	UNSUCCESSFUL
442	25,00	0,00	25,00	UNSUCCESSFUL
443	22,00	0,00	22,00	UNSUCCESSFUL
444	28,00	0,00	28,00	UNSUCCESSFUL
445	24,00	0,00	24,00	UNSUCCESSFUL
446	32,00	22,00	54,00	UNSUCCESSFUL
447	29,00	0,00	29,00	UNSUCCESSFUL
448	11,00	0,00	11,00	UNSUCCESSFUL
449	28,00	0,00	28,00	UNSUCCESSFUL
450	27,00	0,00	27,00	UNSUCCESSFUL
451	24,00	0,00	24,00	UNSUCCESSFUL
452	30,00	0,00	30,00	UNSUCCESSFUL
453	27,00	0,00	27,00	UNSUCCESSFUL
454	40,00	18,00	58,00	UNSUCCESSFUL
455	29,00	0,00	29,00	UNSUCCESSFUL
456	27,00	0,00	27,00	UNSUCCESSFUL
457	22,00	0,00	22,00	UNSUCCESSFUL
458	26,00	0,00	26,00	UNSUCCESSFUL
459	29,00	0,00	29,00	UNSUCCESSFUL
460	24,00	0,00	24,00	UNSUCCESSFUL
461	27,00	0,00	27,00	UNSUCCESSFUL
462	29,00	0,00	29,00	UNSUCCESSFUL
463	34,00	14,50	48,50	UNSUCCESSFUL
464	24,00	0,00	24,00	UNSUCCESSFUL
465	29,00	0,00	29,00	UNSUCCESSFUL
466	25,00	0,00	25,00	UNSUCCESSFUL
467	21,00	0,00	21,00	UNSUCCESSFUL
468	25,00	0,00	25,00	UNSUCCESSFUL
469	39,00	23,00	62,00	UNSUCCESSFUL
470	37,00	29,00	66,00	UNSUCCESSFUL
471	26,00	0,00	26,00	UNSUCCESSFUL
472	28,00	0,00	28,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
473	26,00	0,00	26,00	UNSUCCESSFUL
474	34,00	25,50	59,50	UNSUCCESSFUL
475	30,00	0,00	30,00	UNSUCCESSFUL
476	33,00	20,00	53,00	UNSUCCESSFUL
477	26,00	0,00	26,00	UNSUCCESSFUL
478	23,00	0,00	23,00	UNSUCCESSFUL
479	26,00	0,00	26,00	UNSUCCESSFUL
480	30,00	0,00	30,00	UNSUCCESSFUL
481	29,00	0,00	29,00	UNSUCCESSFUL
482	32,00	26,00	58,00	UNSUCCESSFUL
483	40,00	24,50	64,50	UNSUCCESSFUL
484	37,00	26,50	63,50	UNSUCCESSFUL
485	37,00	15,50	52,50	UNSUCCESSFUL
486	27,00	0,00	27,00	UNSUCCESSFUL
487	30,00	0,00	30,00	UNSUCCESSFUL
488	26,00	0,00	26,00	UNSUCCESSFUL
489	20,00	0,00	20,00	UNSUCCESSFUL
490	29,00	0,00	29,00	UNSUCCESSFUL
491	33,00	24,00	57,00	UNSUCCESSFUL
492	20,00	0,00	20,00	UNSUCCESSFUL
493	29,00	0,00	29,00	UNSUCCESSFUL
494	22,00	0,00	22,00	UNSUCCESSFUL
495	32,00	5,50	37,50	UNSUCCESSFUL
496	30,00	0,00	30,00	UNSUCCESSFUL
497	20,00	0,00	20,00	UNSUCCESSFUL
498	26,00	0,00	26,00	UNSUCCESSFUL
499	34,00	18,50	52,50	UNSUCCESSFUL
500	21,00	0,00	21,00	UNSUCCESSFUL
501	32,00	0,00	32,00	UNSUCCESSFUL
502	24,00	0,00	24,00	UNSUCCESSFUL
503	23,00	0,00	23,00	UNSUCCESSFUL
504	30,00	0,00	30,00	UNSUCCESSFUL
505	23,00	0,00	23,00	UNSUCCESSFUL
506	27,00	0,00	27,00	UNSUCCESSFUL
507	19,00	0,00	19,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
508	26,00	0,00	26,00	UNSUCCESSFUL
509	20,00	0,00	20,00	UNSUCCESSFUL
510	30,00	28,00	58,00	UNSUCCESSFUL
511	35,00	21,50	56,50	UNSUCCESSFUL
512	23,00	0,00	23,00	UNSUCCESSFUL
513	15,00	0,00	15,00	UNSUCCESSFUL
514	29,00	0,00	29,00	UNSUCCESSFUL
515	30,00	0,00	30,00	UNSUCCESSFUL
516	30,00	0,00	30,00	UNSUCCESSFUL
517	29,00	0,00	29,00	UNSUCCESSFUL
518	25,00	0,00	25,00	UNSUCCESSFUL
519	24,00	0,00	24,00	UNSUCCESSFUL
520	27,00	0,00	27,00	UNSUCCESSFUL
521	29,00	0,00	29,00	UNSUCCESSFUL
522	14,00	0,00	14,00	UNSUCCESSFUL
523	32,00	23,50	55,50	UNSUCCESSFUL
524	31,00	0,00	31,00	UNSUCCESSFUL
525	22,00	0,00	22,00	UNSUCCESSFUL
526	24,00	0,00	24,00	UNSUCCESSFUL
527	19,00	0,00	19,00	UNSUCCESSFUL
528	34,00	27,50	61,50	UNSUCCESSFUL
529	36,00	23,00	59,00	UNSUCCESSFUL
530	30,00	0,00	30,00	UNSUCCESSFUL
531	28,00	0,00	28,00	UNSUCCESSFUL
532	31,00	22,00	53,00	UNSUCCESSFUL
533	30,00	15,50	45,50	UNSUCCESSFUL
534	35,00	26,50	61,50	UNSUCCESSFUL
535	36,00	17,50	53,50	UNSUCCESSFUL
536	28,00	0,00	28,00	UNSUCCESSFUL
537	24,00	0,00	24,00	UNSUCCESSFUL
538	30,00	0,00	30,00	UNSUCCESSFUL
539	29,00	0,00	29,00	UNSUCCESSFUL
540	27,00	0,00	27,00	UNSUCCESSFUL
541	35,00	20,50	55,50	UNSUCCESSFUL
542	31,00	12,50	43,50	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
543	28,00	0,00	28,00	UNSUCCESSFUL
544	27,00	0,00	27,00	UNSUCCESSFUL
545	26,00	0,00	26,00	UNSUCCESSFUL
546	24,00	0,00	24,00	UNSUCCESSFUL
547	24,00	0,00	24,00	UNSUCCESSFUL
548	29,00	0,00	29,00	UNSUCCESSFUL
549	30,00	0,00	30,00	UNSUCCESSFUL
550	34,00	16,00	50,00	UNSUCCESSFUL
551	17,00	0,00	17,00	UNSUCCESSFUL
552	31,00	25,00	56,00	UNSUCCESSFUL
553	29,00	0,00	29,00	UNSUCCESSFUL
554	24,00	0,00	24,00	UNSUCCESSFUL
555	34,00	25,00	59,00	UNSUCCESSFUL
556	28,00	0,00	28,00	UNSUCCESSFUL
557	25,00	0,00	25,00	UNSUCCESSFUL
558	22,00	0,00	22,00	UNSUCCESSFUL
559	32,00	19,00	51,00	UNSUCCESSFUL
560	23,00	0,00	23,00	UNSUCCESSFUL
561	26,00	0,00	26,00	UNSUCCESSFUL
562	24,00	0,00	24,00	UNSUCCESSFUL
563	23,00	0,00	23,00	UNSUCCESSFUL
564	22,00	0,00	22,00	UNSUCCESSFUL
565	29,00	0,00	29,00	UNSUCCESSFUL
566	38,00	19,50	57,50	UNSUCCESSFUL
567	33,00	6,50	39,50	UNSUCCESSFUL
568	30,00	0,00	30,00	UNSUCCESSFUL
569	22,00	0,00	22,00	UNSUCCESSFUL
570	29,00	0,00	29,00	UNSUCCESSFUL
571	27,00	0,00	27,00	UNSUCCESSFUL
572	38,00	15,50	53,50	UNSUCCESSFUL
573	26,00	0,00	26,00	UNSUCCESSFUL
574	22,00	0,00	22,00	UNSUCCESSFUL
575	29,00	0,00	29,00	UNSUCCESSFUL
576	24,00	0,00	24,00	UNSUCCESSFUL
577	22,00	0,00	22,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
578	27,00	0,00	27,00	UNSUCCESSFUL
579	25,00	0,00	25,00	UNSUCCESSFUL
580	29,00	0,00	29,00	UNSUCCESSFUL
581	24,00	0,00	24,00	UNSUCCESSFUL
582	23,00	0,00	23,00	UNSUCCESSFUL
583	34,00	23,00	57,00	UNSUCCESSFUL
584	22,00	0,00	22,00	UNSUCCESSFUL
585	33,00	12,00	45,00	UNSUCCESSFUL
586	29,00	0,00	29,00	UNSUCCESSFUL
587	23,00	0,00	23,00	UNSUCCESSFUL
588	27,00	0,00	27,00	UNSUCCESSFUL
589	31,00	17,00	48,00	UNSUCCESSFUL
590	29,00	0,00	29,00	UNSUCCESSFUL
591	17,00	0,00	17,00	UNSUCCESSFUL
592	33,00	20,00	53,00	UNSUCCESSFUL
593	26,00	0,00	26,00	UNSUCCESSFUL
594	22,00	0,00	22,00	UNSUCCESSFUL
595	24,00	0,00	24,00	UNSUCCESSFUL
596	29,00	0,00	29,00	UNSUCCESSFUL
597	25,00	0,00	25,00	UNSUCCESSFUL
598	22,00	0,00	22,00	UNSUCCESSFUL
599	27,00	0,00	27,00	UNSUCCESSFUL
600	25,00	0,00	25,00	UNSUCCESSFUL
601	31,00	12,50	43,50	UNSUCCESSFUL
602	25,00	0,00	25,00	UNSUCCESSFUL
603	29,00	0,00	29,00	UNSUCCESSFUL
604	25,00	0,00	25,00	UNSUCCESSFUL
605	31,00	26,00	57,00	UNSUCCESSFUL
606	23,00	0,00	23,00	UNSUCCESSFUL
607	27,00	0,00	27,00	UNSUCCESSFUL
608	18,00	0,00	18,00	UNSUCCESSFUL
609	24,00	0,00	24,00	UNSUCCESSFUL
610	27,00	0,00	27,00	UNSUCCESSFUL
611	34,00	23,00	57,00	UNSUCCESSFUL
612	28,00	0,00	28,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
613	28,00	0,00	28,00	UNSUCCESSFUL
614	21,00	0,00	21,00	UNSUCCESSFUL
615	21,00	0,00	21,00	UNSUCCESSFUL
616	30,00	0,00	30,00	UNSUCCESSFUL
617	20,00	0,00	20,00	UNSUCCESSFUL
618	18,00	0,00	18,00	UNSUCCESSFUL
619	22,00	0,00	22,00	UNSUCCESSFUL
620	30,00	28,00	58,00	UNSUCCESSFUL
621	24,00	0,00	24,00	UNSUCCESSFUL
622	28,00	0,00	28,00	UNSUCCESSFUL
623	28,00	0,00	28,00	UNSUCCESSFUL
624	27,00	0,00	27,00	UNSUCCESSFUL
625	36,00	25,00	61,00	UNSUCCESSFUL
626	26,00	0,00	26,00	UNSUCCESSFUL
627	23,00	0,00	23,00	UNSUCCESSFUL
628	26,00	0,00	26,00	UNSUCCESSFUL
629	30,00	0,00	30,00	UNSUCCESSFUL
630	34,00	22,50	56,50	UNSUCCESSFUL
631	37,00	14,00	51,00	UNSUCCESSFUL
632	37,00	14,50	51,50	UNSUCCESSFUL
633	32,00	12,00	44,00	UNSUCCESSFUL
634	29,00	0,00	29,00	UNSUCCESSFUL
635	23,00	0,00	23,00	UNSUCCESSFUL
636	30,00	24,00	54,00	UNSUCCESSFUL
637	35,00	21,50	56,50	UNSUCCESSFUL
638	30,00	0,00	30,00	UNSUCCESSFUL
639	36,00	25,50	61,50	UNSUCCESSFUL
640	32,00	17,50	49,50	UNSUCCESSFUL
641	32,00	17,00	49,00	UNSUCCESSFUL
642	28,00	0,00	28,00	UNSUCCESSFUL
643	24,00	0,00	24,00	UNSUCCESSFUL
644	37,00	26,50	63,50	UNSUCCESSFUL
645	35,00	22,50	57,50	UNSUCCESSFUL
646	25,00	0,00	25,00	UNSUCCESSFUL
647	32,00	12,50	44,50	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
648	35,00	15,00	50,00	UNSUCCESSFUL
649	32,00	0,00	32,00	UNSUCCESSFUL
650	38,00	26,50	64,50	UNSUCCESSFUL
651	44,00	9,50	53,50	UNSUCCESSFUL
652	30,00	0,00	30,00	UNSUCCESSFUL
653	19,00	0,00	19,00	UNSUCCESSFUL
654	35,00	0,00	35,00	UNSUCCESSFUL
655	29,00	0,00	29,00	UNSUCCESSFUL
656	35,00	16,50	51,50	UNSUCCESSFUL
657	21,00	0,00	21,00	UNSUCCESSFUL
658	22,00	0,00	22,00	UNSUCCESSFUL
659	22,00	0,00	22,00	UNSUCCESSFUL
660	21,00	0,00	21,00	UNSUCCESSFUL
661	30,00	0,00	30,00	UNSUCCESSFUL
662	26,00	0,00	26,00	UNSUCCESSFUL
663	23,00	0,00	23,00	UNSUCCESSFUL
664	22,00	0,00	22,00	UNSUCCESSFUL
665	22,00	0,00	22,00	UNSUCCESSFUL
666	28,00	0,00	28,00	UNSUCCESSFUL
667	27,00	0,00	27,00	UNSUCCESSFUL
668	23,00	0,00	23,00	UNSUCCESSFUL
669	26,00	0,00	26,00	UNSUCCESSFUL
670	24,00	0,00	24,00	UNSUCCESSFUL
671	29,00	0,00	29,00	UNSUCCESSFUL
672	21,00	0,00	21,00	UNSUCCESSFUL
673	33,00	26,50	59,50	UNSUCCESSFUL
674	27,00	0,00	27,00	UNSUCCESSFUL
675	25,00	0,00	25,00	UNSUCCESSFUL
676	28,00	0,00	28,00	UNSUCCESSFUL
677	30,00	0,00	30,00	UNSUCCESSFUL
678	28,00	0,00	28,00	UNSUCCESSFUL
679	25,00	0,00	25,00	UNSUCCESSFUL
680	25,00	0,00	25,00	UNSUCCESSFUL
681	25,00	0,00	25,00	UNSUCCESSFUL
682	24,00	0,00	24,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
683	19,00	0,00	19,00	UNSUCCESSFUL
684	19,00	0,00	19,00	UNSUCCESSFUL
685	26,00	0,00	26,00	UNSUCCESSFUL
686	35,00	0,00	35,00	UNSUCCESSFUL
687	36,00	25,00	61,00	UNSUCCESSFUL
688	29,00	0,00	29,00	UNSUCCESSFUL
689	24,00	0,00	24,00	UNSUCCESSFUL
690	19,00	0,00	19,00	UNSUCCESSFUL
691	35,00	22,00	57,00	UNSUCCESSFUL
692	27,00	0,00	27,00	UNSUCCESSFUL
693	22,00	0,00	22,00	UNSUCCESSFUL
694	27,00	0,00	27,00	UNSUCCESSFUL
695	27,00	0,00	27,00	UNSUCCESSFUL
696	25,00	0,00	25,00	UNSUCCESSFUL
697	26,00	0,00	26,00	UNSUCCESSFUL
698	20,00	0,00	20,00	UNSUCCESSFUL
699	28,00	0,00	28,00	UNSUCCESSFUL
700	36,00	12,00	48,00	UNSUCCESSFUL
701	30,00	0,00	30,00	UNSUCCESSFUL
702	24,00	0,00	24,00	UNSUCCESSFUL
703	30,00	0,00	30,00	UNSUCCESSFUL
704	32,00	25,50	57,50	UNSUCCESSFUL
705	29,00	0,00	29,00	UNSUCCESSFUL
706	34,00	20,00	54,00	UNSUCCESSFUL
707	20,00	0,00	20,00	UNSUCCESSFUL
708	29,00	0,00	29,00	UNSUCCESSFUL
709	23,00	0,00	23,00	UNSUCCESSFUL
710	29,00	0,00	29,00	UNSUCCESSFUL
711	30,00	0,00	30,00	UNSUCCESSFUL
712	30,00	17,00	47,00	UNSUCCESSFUL
713	27,00	0,00	27,00	UNSUCCESSFUL
714	30,00	0,00	30,00	UNSUCCESSFUL
715	26,00	0,00	26,00	UNSUCCESSFUL
716	28,00	0,00	28,00	UNSUCCESSFUL
717	30,00	0,00	30,00	UNSUCCESSFUL

APPENDIX 1: Results of enrolled Candidates in the first technical qualification exam for the creation of the Brazilian National Register of Forensic Accountants in 2017

SEQ	Multiple_choice test	Essay test	Performance score	Status
718	26,00	0,00	26,00	UNSUCCESSFUL
719	19,00	0,00	19,00	UNSUCCESSFUL
720	28,00	0,00	28,00	UNSUCCESSFUL
721	27,00	0,00	27,00	UNSUCCESSFUL
722	22,00	0,00	22,00	UNSUCCESSFUL
723	22,00	0,00	22,00	UNSUCCESSFUL
724	25,00	0,00	25,00	UNSUCCESSFUL
725	26,00	0,00	26,00	UNSUCCESSFUL
726	33,00	0,00	33,00	UNSUCCESSFUL
727	17,00	0,00	17,00	UNSUCCESSFUL
728	28,00	0,00	28,00	UNSUCCESSFUL
729	20,00	0,00	20,00	UNSUCCESSFUL
730	25,00	0,00	25,00	UNSUCCESSFUL
731	27,00	0,00	27,00	UNSUCCESSFUL
732	23,00	0,00	23,00	UNSUCCESSFUL
733	16,00	0,00	16,00	UNSUCCESSFUL
734	37,00	25,00	62,00	UNSUCCESSFUL
735	20,00	0,00	20,00	UNSUCCESSFUL
736	29,00	0,00	29,00	UNSUCCESSFUL
737	22,00	0,00	22,00	UNSUCCESSFUL
738	27,00	0,00	27,00	UNSUCCESSFUL
739	22,00	0,00	22,00	UNSUCCESSFUL
740	29,00	0,00	29,00	UNSUCCESSFUL
741	22,00	0,00	22,00	UNSUCCESSFUL
742	26,00	0,00	26,00	UNSUCCESSFUL
743	28,00	0,00	28,00	UNSUCCESSFUL
744	26,00	0,00	26,00	UNSUCCESSFUL
745	29,00	0,00	29,00	UNSUCCESSFUL