



WIENER MEDIZINISCHE AKADEMIE
VIENNA MEDICAL ACADEMY

Instruction for examiners
JBM Kuks, coordinator



iCognitus
IT SOLUTIONS

Examination Committee



Jan
Kuks
Netherlands



David
Garcia-Azorin
Spain



Pablo
Irimia Sieira
Spain



Manuel
Alegre Esteban
Spain



Massimiliano
Filosto
Italy



Francesco
Di Lorenzo
Italy



Deborah
McIntyre
Luxembourg



Tim
Counihan
Ireland



Gabrielle
Lohner
Austria



Jasenko
Selimović
Austria



Nuno
Santos
Portugal

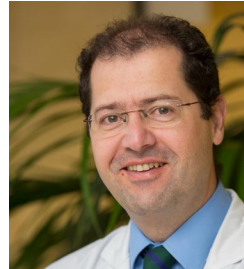
Examination Committee



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Netherlands



David
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Spain



Pablo
Irimia Sieira
Spain



EAN-person
RRFS?



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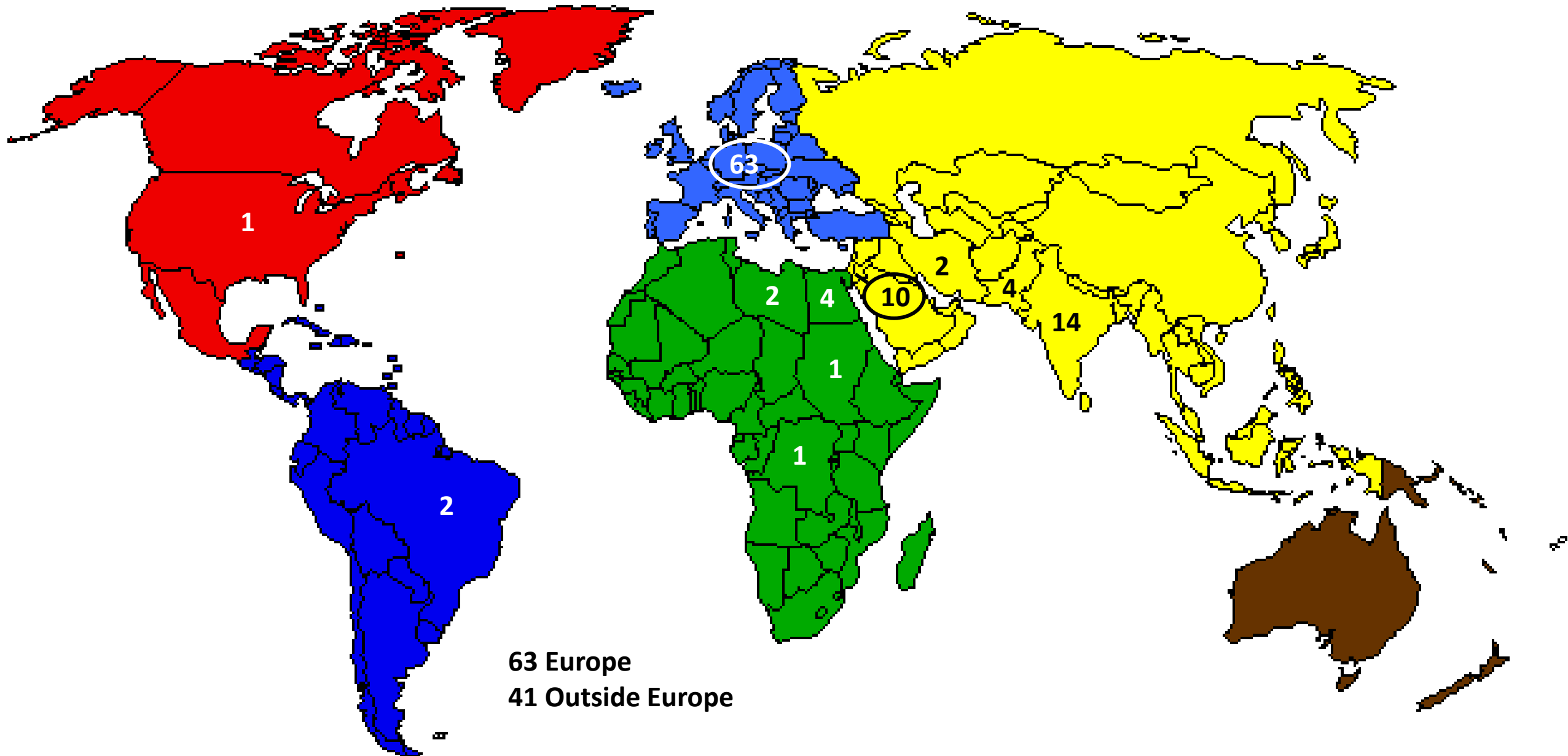


Nuno
Santos
Portugal



iCognitus
IT SOLUTIONS

Participants 2023



Participants 2023



WWW.FREEWORLDMAPS.NET

Map data ©2017 ORION-ME

Oral Examination



Our first complete Exam with iCognitus



- In order to make the process independent from my participation.
 - Many problems related with the phase of development.
 - Several misunderstandings before the Exam, last minute changes.
 - High requirements of the system, problems with signing in.
 - Written back-up of the examination results to prevent problems.
- Analysis of errors in progress. Will be discussed later on.

Oral Examination



E01,lperjud@umfcluj.ro
E02,vincenzo@silani.com
E03,alexbis@pt.lu
E04,gilles.edan@chu-rennes.fr
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E25,grisoldw@gmail.com
E26,walter.struhal@tulln.lknoe.at
E27,angelo.antonini@unipd.it

- Difficulty with getting examiners
- Cancellations after commitment
- Limited response (1) after 2nd request within EBN

Oral Examination



E01,lperjud@umfcluj.ro

E02,vincenzo@silani.com

E03,alexbis@pt.lu

E04,gilles.edan@chu-rennes.fr

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E25,grisoldw@gmail.com

E26,walter.struhal@tulln.lknoe.at

E27,angelo.antonini@unipd.it

11 / 27 are EBN-members

Written Examination



- 98 online candidates.
- David and Jan were around.
- No big problems.
- See evaluation of examinees (in the autumn meeting)
- Analysis of errors in progress. Will be discussed later on.

Question Database (n=428)

- 55 1. Vascular
- 37 2. Cognition, including dementia, cortical functions
- 23 3. Epilepsy
- 26 4. Headache
- 20 5. Immunology, including MS
- 18 6. Infections
- 60 7. Movement disorders
- 8 8. Intensive care neurology
- 9 9. Trauma
- 11 10. Complications of internal diseases
- 51 11. Neuromuscular Disorders
- 17 12. Oncology
- 32 13. Cranial nerves, including neuro-otologie and neuro-ophthalmology
- 8 14. Neuropsychiatry
- 2 15. Neurorehabilitation
- 4 16. Pain
- 11 17. CSF
- 21 18. Sleep
- 27 19. Spinal cord and brainstem, including neuronopathy
- 22 20. Autonomic Nervous System, including neuro-urology

Acquisition

- EAN-committees (many)
- EBN (Cras, Fredrikson, de Visser)
- Teaching Courses (several)
- E-Learning (?)
- Individual authors (Vodusek)
- EC-members (Kuks)

Question writing for the UEMS_EBN exam



Gabrielle Lohner <gl@wma.co.at>

Aan all-members@uems-neuroboard.org

CC ebn-examination@wma.co.at



Beantwoorden

Allen beantwoorden

Doorsturen



wo 12-4-2023 19:32



EBN Exam letter to question writers.docx
37 KB



Tips and Tricks writing questions for European Neurology.pdf
186 KB



EBN Exam Question Stencil.docx
37 KB



Dear Members of the UEMS_EBN!

On behalf of Prof. Jan Kuks, Chair of the EBN Examination Committee, I would like to invite you **to support the EBN with the preparation of examination questions** and to consider the following annexes:

- EBN Exam letter to question writers
- Tips and Tricks writing questions for European Neurology
- EBN Exam question Stencil

Kind regards, and thank you very much in advance!

Gabrielle Lohner

Mag. Gabrielle Lohner
Section of Neurology – European Board of Neurology
c/o Vienna Medical Academy

- I do not feel able to do so
- I do not have time by now
- I will send you some a.s.a.p.
- There you go, enjoy
-

22 nieuwe meldir

Categories

1. Vascular	10
2. Cognition, including dementia, cortical functions	9
3. Epilepsy	6
4. Headache	9
5. Immunology, including MS	9
6. Infections	7
7. Movement disorders	11
8. Intensive care neurology	9
9. Trauma	7
10. Complications of internal diseases	6
11. Neuromuscular Disorders	10
12. Oncology	5
13. Cranial nerves, including neuro-otologie and neuro-ophthalmology	6
14. Neuropsychiatry	5
15. Neurorehabilitation	1
16. Pain	4
17. CSF	3
18. Sleep	6
19. Spinal cord and brainstem, including neuronopathy	8
20. Autonomic Nervous System, including neuro-urology	4



Statistics
individual questions

P-value
Higher -> Easier
[60-75%]

RIT-value
Differentiation
[>.2]

Closed book

Topics are known.

Only new questions (40)

Open book I

Only 'old' questions (30)

Open book II

Only 'new' questions (30)

Total exam (100)



**Statistics
test as a whole**

Mean p-value
Higher -> Easier
[60-75%]

Kuder Richardson
Higher-> More reliable
[>.7]

SNR
[>5?]

Closed book

Topics are known.

Only new questions (40)

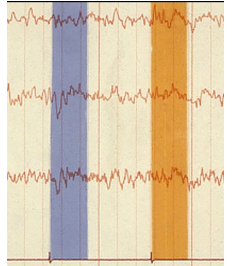
Open book I

Only 'old' questions (30)

Open book II

Only 'new' questions (30)

Total exam (100)



Statistics	Mean p-value Higher -> Easier [60-75%]	Kuder Richardson Higher-> More reliable [>.7]	SNR [>5?]
Closed book Topics are known. Only new questions (40)	.68	.83	5
Open book I Only 'old' questions (30)	.66	.75	3
Open book II Only 'new' questions (30)	.70	.67	2
Total exam (100)	.67	.90	9



Total Results



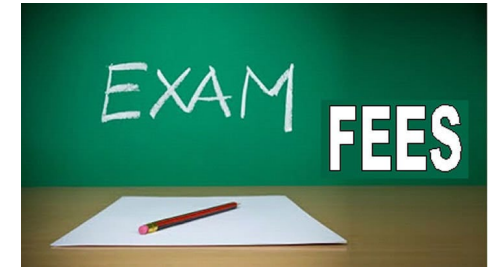
	'23	'22	'21	'19	'18	'17	'16	'15	'14
90 – 100	0%	1%	4%	2%	1%	4%			
80 – 90	22%	18%	26%	18%	19%	18%	14%	5%	10%
70 – 80	31%	34%	30%	26%	32%	37%	42%	33%	21%
60 – 70	27%	27%	19%	29%	22%	21%	20%	17%	39%
55 – 60	11%	6%	4%	13%	12%	18%	13%	32%	23%

Failure	9%	14%	12%	12%	14%	4%	7%	13%	7%

Survey for Examinees (n=98)

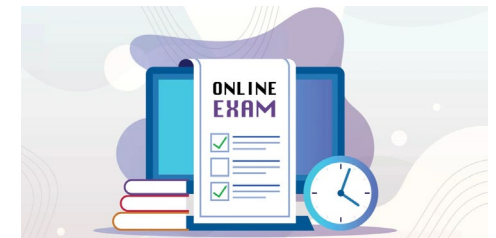
1. I find the examination fee is affordable.

12	20	19	16	11
1	2	3	4	5



2. I prefer an online exam to a live exam.

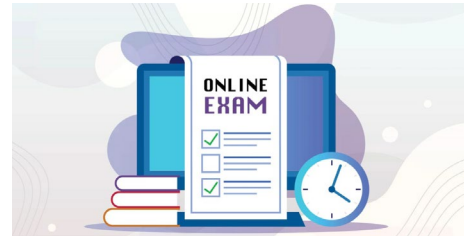
4	4	10	16	44
1	2	3	4	5



Survey for Examinees (n=98)

3. If there would have been a live exam in Budapest at the site of the congress I would have taken this instead of this online exam.

26 **16** **15** **12** **9**
1 **2** **3** **4** **5**



4. If there had only been a live exam in Budapest at the site of the congress I would still have taken the 2023 EBN exam.

17 **8** **17** **19** **17**
1 **2** **3** **4** **5**



6. I will attend the EAN congress in Budapest.

25 **52**
1 Yes **2 No**

Survey for Examiners (n=27)



20. What's your opinion taking these (dis)advantages into account?

- a. 4 The oral exams should be taken in person at the site of the congress anyway.
- b. 2 The oral exams preferentially should be taken in person at the site of the congress but may be taken online as well.
- c. 3 The oral exams mainly can be organized online but may be taken live at the site of the congress as well.
- d. - The oral exams can be organized online anyway taking the (dis)advantages into account.

Survey for Examiners (n=27)



17. Would you like to be involved in further Oral EBN Exams?

1. Yes, only online. **3**
2. Yes, only live at the site of the congress **----**
3. Yes, both live and online is fine with me **11**
4. No, not for the time being. **1**

Comments

Online was more feasible than I had anticipated

I would like to be involved in future Oral EBN exams.

Online should be always possible.

Onsite would depend if I am attending the EAN congress

Survey for Examiners (n=27)

18. Would you be willing to attend a subsidized one-day training for examiners, e.g. in London?

4	3	4	4	3
1	2	3	4	5



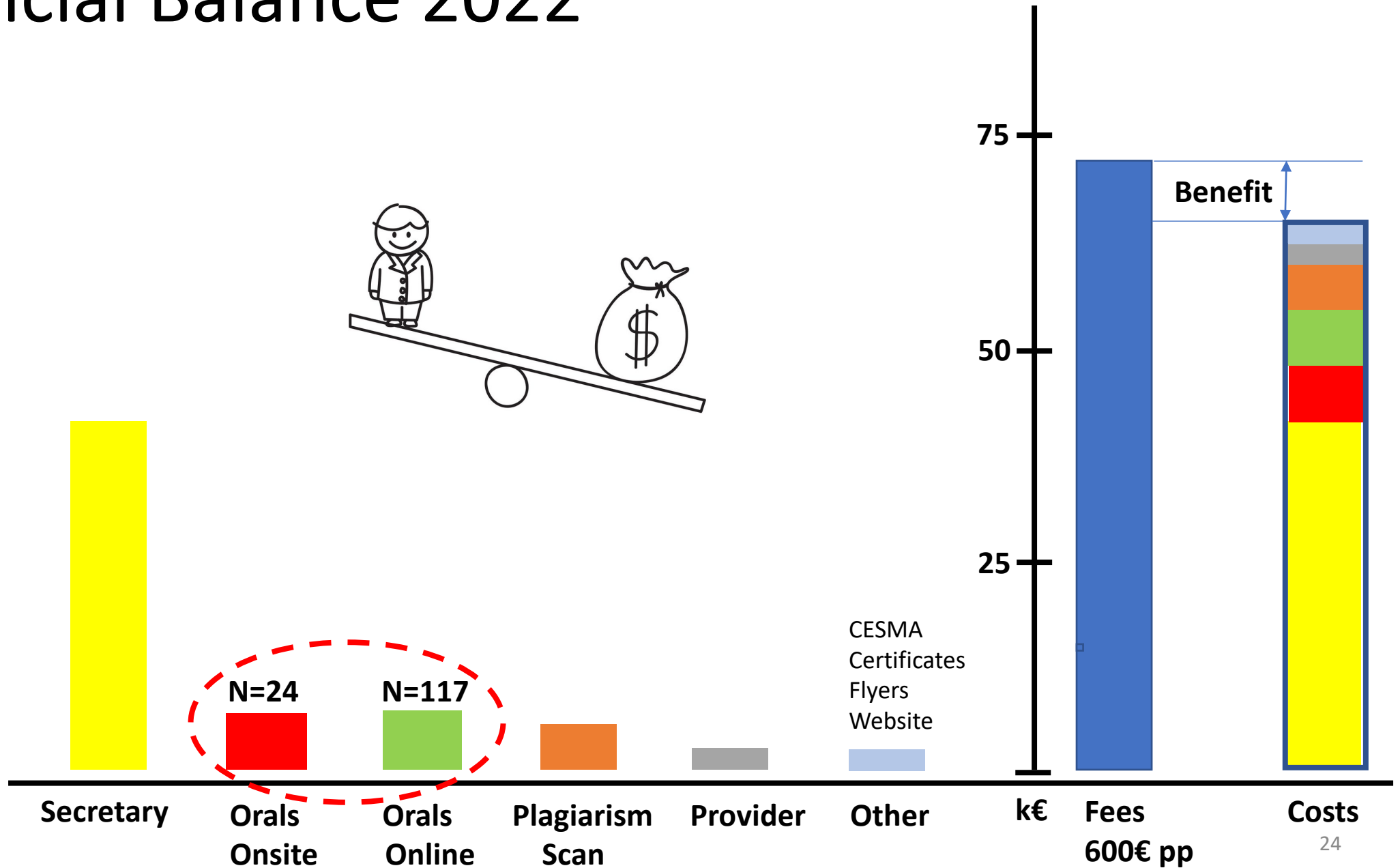
Survey for Examinees

5. It is important for me to have feedback about my achievement in this EBN exam.

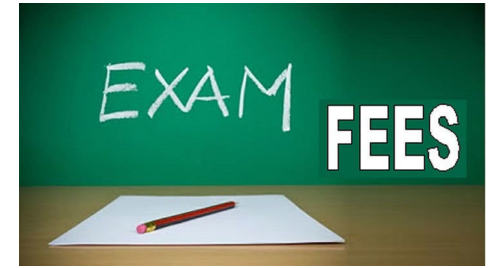
0 0 5 9 63



Financial Balance 2022



Budget



PAYMENT

Please transfer ASAP the fee free of charge for the beneficiary.

Admission Fees (in EUR)

Earlybird fee
until January 15, 2023

Regular fee
before March 01, 2023

Exam Fee €

600

700

$$71 * 600 = 42.600$$

Earlybird

$$28 * 700 = 19.600$$

Regular

$$5 * 300 = 1.500$$

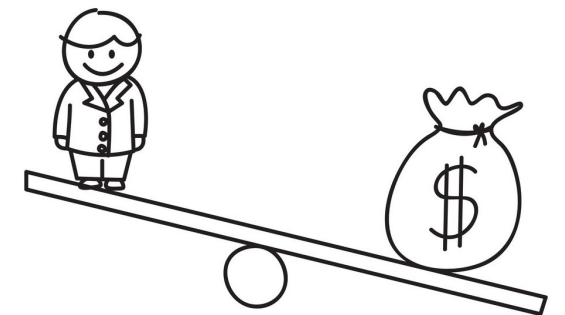
Resits

104

63.700

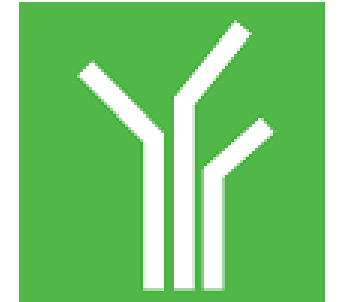
Budget

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Costs EBN	28.728,00	30.241,00	38.141,00	41.963,00	47.553,00	20.429,00	44.057,00	54.212,09	54.324,00
Total Costs EAN	8.000,00	13.065,04	15.000,00	5.665,00	5.840,00	5.222,50	12.022,61	13.432,61	350,40
Total Costs EBN + EAN	36.728,00	43.306,04	53.141,00	47.628,00	53.393,00	25.651,50	56.079,61	67.644,70	54.674,40
Incoming Exam Fees	26.759,00	32.000,00	43.837,00	44.145,00	59.513,00	45.835,00	70.773,00	73.906,00	63.700,00
Financial result	-9.969,00	-11.306,04	-9.304,00	-3.483,00	6.120,00	20.183,50	14.693,39	6.261,30	9.025,60



Year	2021	2022	2023
# Candidates	200	158	104
Question database handling			
Provider Portugal (iCognitus)	2.600,00	2.200,00	3.599,00
Plagiarism			
Plagiarism Scan EAN	5.863,01	5.863,01	0,00
Examination Day			
Accom. Examiners&employees	0,00	1.023,20	0,00
Fees onsite/online assistants	4.135,00	3.015,00	3.000,00
Catering Exam candidates	0,00	422,20	0,00
Catering Examiners and staff	0,00	422,20	0,00
Project Manager preparation	3.000,00	2.000,00	0,00
Project Manager online support	1.600,00	1.600,00	0,00
Zoom rooms (EAN)	1.119,20	1.119,20	0,00

Effect iCognitus



Year	2021	2022	2023
# Candidates	200	158	104
Question database handling			
Provider Portugal (iCognitus)	2.600,00	2.200,00	3.599,00
Plagiarism			
Plagiarism Scan EAN	5.863,01	5.863,01	0,00
Examination Day			
Accom. Examiners&employees	0,00	1.023,20	0,00
Fees onsite/online assistants	4.135,00	3.015,00	3.000,00
Catering Exam candidates	0,00	422,20	0,00
Catering Examiners and staff	0,00	422,20	0,00
Project Manager preparation	3.000,00	2.000,00	0,00
Project Manager online support	1.600,00	1.600,00	0,00
Zoom rooms (EAN)	1.119,20	1.119,20	0,00

On site Exams



+ exam-rooms
+ accommodation

Plans for the near future

- Analysis of errors in 2023
- Setting the real balance
- Writing the report
- Rewriting the standard operating procedure (SOP)
- Orals at the congress? If so, who will take the organization?
- Study-material for the closed book exam
- Scanning the E-learning modules for question writing
- Extending the tasks of iCognitus



Calculation of the marks

Two exam

- Structured summ

- A global

- These

F

Filling in t
scoring 3

Normalizi

As an example:

Written score 71 (max 100)

Orals

CAT_{structured} CAT_{global} Essay_{structured} Essay_{global} Clin Pres_{structured} Clin Pres_{global}

Max. obtainable

Examiner 1

Examiner 2

15

12

10

8

7

12

8

7

7

7

7

20

18

16

7

8

Examiner 1

$$2/3 * 10 * (12/15) + 1/3 * 8 + 2/3 * 10 * (8/12) + 1/3 * 7 + 2/3 * 10 * (18/20) + 1/3 * 7 =$$

5,3

+ 2,66

+ 4,44

+ 2,33

+ 6

+ 2,66

= 23,39 (max 30)

Examiner 2

$$2/3 * 10 * (10/15) + 1/3 * 7 + 2/3 * 10 * (7/12) + 1/3 * 7 + 2/3 * 10 * (16/20) + 1/3 * 8 =$$

4,44

+ 2,33

+ 3,88

+ 2,33

+ 5,33

+ 2,66

= 21,08 (max 30)

Examiner 1 + 2 = 44,47 (max 60) -> [transformation * 5/3] -> 74,11 (max 100)

Oral score 74,11 (max 100)

Total score = .7 * 71 + .3 * 74,11 = 71,9 (max 100)

Scientific Theatre July 2nd 2.30

16TH
EUROPEAN
BOARD
EXAMINATION
IN
NEUROLOGY

1

The European Board of Neurology aims at Harmonisation of Postgraduate Training of Specialists.

2

Board Exam Clinical Neurology UEMS

A European board certification is a process by which a medical specialist demonstrates a mastery of competencies required for practicing in an area of medical specialization.

3



To help you migrating within Europe To show your level of excellence and to become a Fellow of the European Board of Neurology

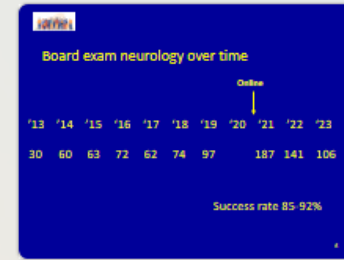
4



There are many European Examinations

- Allergy and clinical immunology
- Anesthesiology
- Cardiology
- Cardiovascular Surgery
- Dermatology and Venereology
- Endocrine Surgery
- Gastrointestinal Medicine
- General Surgery
- Hand Surgery
- Internal Medicine
- Intensive Care
- Neurology
- Neurosurgery
- Nuclear Medicine
- Ophthalmology
- Oral Surgery
- Orthopaedics and Traumatology
- Disorders of Neurology
- Pathology
- Pediatric Surgery
- Pulmonology
- Rehabilitation Medicine
- Reconstructive Surgery
- Surgical Oncology
- Transplantation Medicine
- Urology
- Vascular disease
- Vascular Surgery

5



6



7



8



9

Admission Fee (in EUR)	Candidate fee until January 15, 2023	Regular fee before March 31, 2023
Exam Fee €	500	700

- Reduction for those who subscribed for a previous exam
- Discount for the EAN congress for all (20% members, 10% non-members EAN/RRFS)

10



What will be tested?

11

We do not want you just to retrieve dry knowledge but to show your other competencies as well.

Therefore we also test

- presentation abilities
- handling knowledge
- discussing ethics and public health topics
- clinical reasoning
- scientific reasoning

12



You do not want us to take a snapshot on the day of the examination. You definitely want us to test your competencies as they are there in your daily life.

Therefore we allow you to do part of the exam at your own desk and to use your own reference sources during the Exam!

13



How will this be examined?

Step 1 Written

Step 2 Oral

14



Written Part (70%)

100 Multiple Choice questions clinical neurology

60% cases with open Book

15

MCQ open Book ?

STUDENTS NEED TO SOLVE REAL PROBLEMS THAT CONNECT TO A REAL CONTEXT.

16



MCQ open Book !

Unfortunately we are not yet ready for allowing electronic devices

17



About 90% of the written questions is derived from these sources

E-Learning

Journal papers provided on the website

Textbook

18

Examination is like peeing in your pants. Everyone can see it, but only you can feel the warmth.



- Being an examiner
- Reviewing questions
- Writing questions from scratch
- Deriving questions from e-learning