



● ● ●  
PSYCHOMETRIC  
SOLUTIONS  
GROUP

# Examination Report

Part 2 Fellowship of the Royal College of  
Ophthalmologists (FRCOphth) Oral  
Examination

July 2023

Kiran Sanghara, Lucy Foard, Sian Williams

---

# Contents

<b>1 Summary</b> .....	<b>3</b>
<b>2 Standard Setting</b> .....	<b>3</b>
2.1 Hofstee .....	3
<b>3 The structured vivas</b> .....	<b>4</b>
3.1 Results .....	4
3.2 Standard setting for the structured vivas.....	6
<b>4 The objective structured clinical examination (OSCE)</b> .....	<b>7</b>
4.1 Results .....	7
4.2 Standard setting for the OSCEs .....	9
<b>5 Overall results for the oral examination</b> .....	<b>10</b>
5.1 Results .....	10
5.2 Comparison to previous examinations.....	11

---

# 1 Summary

---

The part 2 Fellowship of the Royal College of Ophthalmologists (FRCOphth) oral examination consists of two elements. The objective structured clinical examination (OSCE) consists of six stations worth a total of 198 marks, whilst the structured viva consists of five stations worth a total of 120 marks. One of the OSCE stations is conducted with the vivas.

A total of 20 candidates sat the examination.

The pass mark for the structured viva was 77 and the pass mark for the OSCE was 128.

The reliability of the oral examination was 0.793 (Viva) and 0.884 (OSCE).

The pass rates for the viva and the OSCE were 14/20 (70 per cent) and 14/20 (70 per cent) respectively. The overall pass rate was 13/20 (65 per cent).

## 2 Standard Setting

---

Candidates must be able to accurately assess visual acuity, measure refractive error and recommend an appropriate spectacle correction to pass the RCert. The pass mark is identified using the Hofstee method:

### 2.1 Hofstee method

After the examination, examiners were asked to review the parameters for the standard setting based upon their judgment of the difficulty of the stations. The following values were used to set the pass mark:

- The maximum credible pass mark for the examination = 65%
- The minimum credible pass mark for the examination = 55%
- The maximum credible pass rate for the examination = 100%
- The minimum credible pass rate for the examination = 45% (OSCE), 55% (VIVA)

The cumulative fail rate as a function of the pass mark and the co-ordinates derived from the four values above were plotted on a graph. The point where a line joining the two coordinates intersects the cumulative function curve is used to identify the pass mark.

Plots visualising this process for each part of the examination are shown in the relevant sections below.

---

## 3 The structured vivas

---

There were five structured vivas, which were held on Monday 10<sup>th</sup> July. The communication skills OSCE station was conducted as one of the viva stations, making six stations in all (the OSCE station is not included in the analysis of the viva; it is merely administered at the same time). Each viva lasted 10 minutes. The viva stations were:

- Station 1: Patient investigations and data interpretation
- Station 2: Patient management 1
- Station 3: Patient management 2
- Station 4: Attitudes, ethics and responsibilities.
- Station 5: Audit, research and EBM and Health promotion and disease prevention

### 3.1 Results

Maximum mark (five stations, 10 examiners (2 per station), 24 marks per station): 120

*Table 1: Marks for the viva*

Statistic	Value	Percentage
Pass mark (using Hofstee method)	72.3/120	60.3%
Mean score	82.6/120	68.8%
Median score	84.5/120	70.4%
Range	55-106	45.8% - 88.3%
Reliability (Cronbach's alpha)	0.793	
SEM (rounded)	5.27 (5)	4.39%
Final adjusted pass mark (+1 SEM)	77/120	64.2%
Pass rate	14/20	70.0%

Figure 1: Distribution of viva scores (red line denotes pass mark)

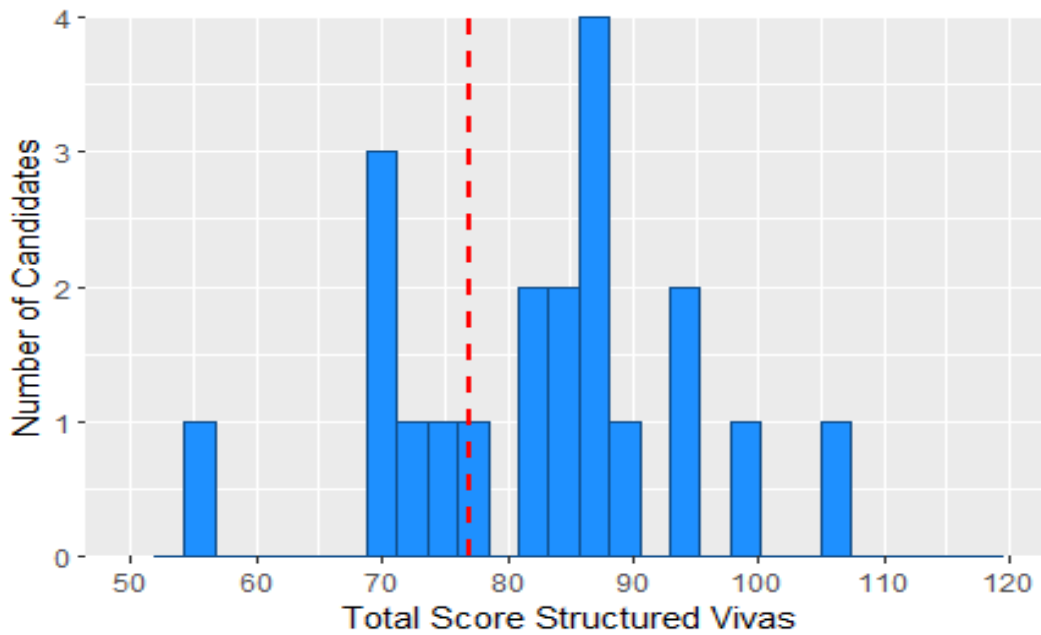


Table 2: Station Summary — viva

Station	Category	Maximum possible	Mean	Median	Min	Max
1	PI	24	18.3	18	11	24
2	PM1	24	16.1	16	8	22
3	PM2	24	14.6	14	7	23
4	AER	24	17.9	18	12	24
5	HPDP/EBM	24	15.8	16	8	22

Table 3: Correlation between examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5
Category	PI	PM1	PM2	AER	HPDP/EBM
Correlation	0.92	0.92	0.85	0.72	0.69

Table 4: Mean absolute difference in examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5
Category	PI	PM1	PM2	AER	HPDP/EBM
Mean absolute difference*	0.5	0.5	0.85	1.05	1.0

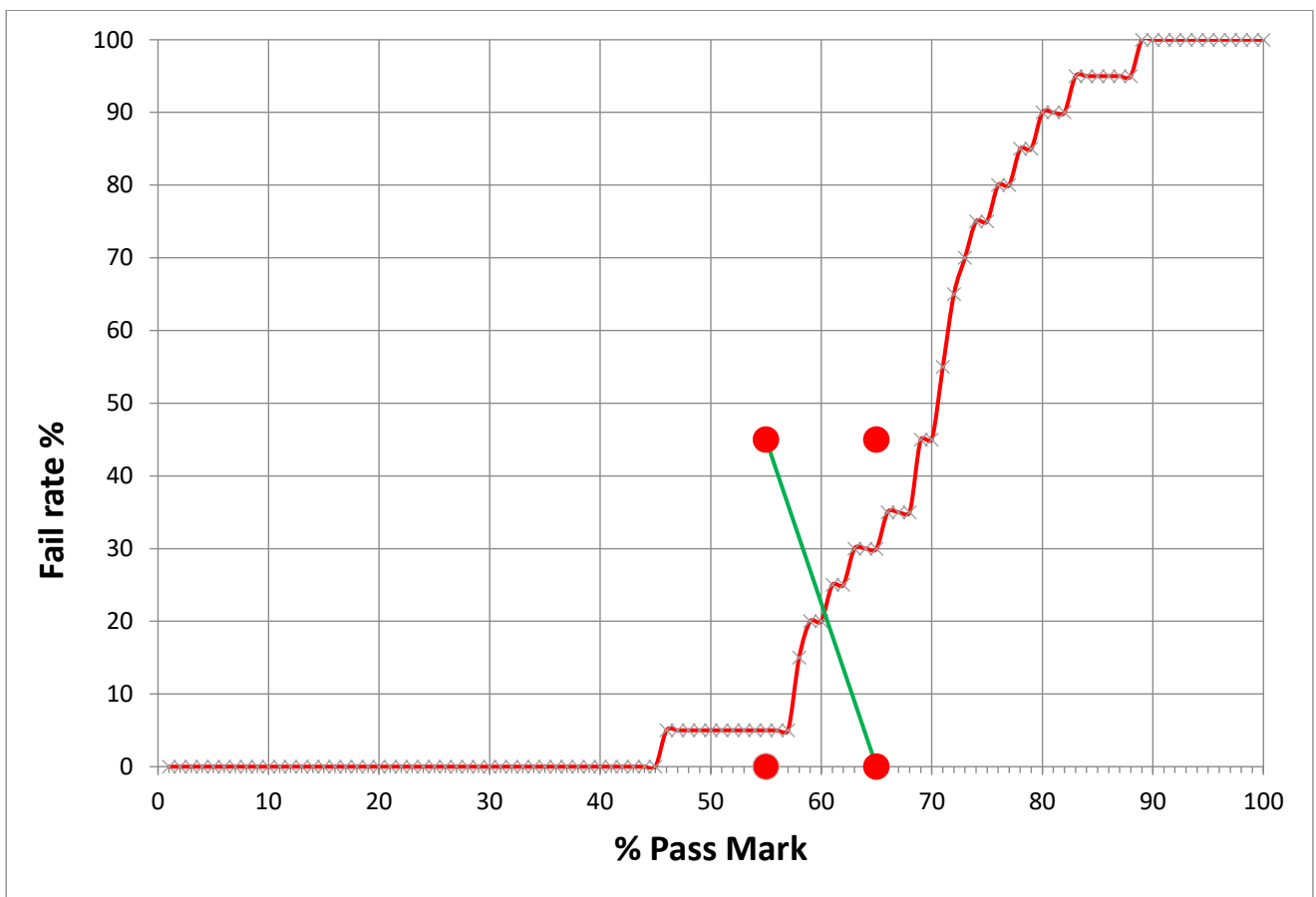
\*The 'mean absolute difference' is the average difference between Examiner A and Examiner B scores for each station

Table 5: Correlation between viva stations

	Station 1	Station 2	Station 3	Station 4	Station 5
Station 1					
Station 2	-0.20				
Station 3	0.28	0.29			
Station 4	0.44	-0.03	0.32		
Station 5	0.23	0.42	0.34	0.24	

### 3.2 Standard setting for the structured vivas

Figure 2: Hofstee plot – Vivas



---

## 4 The objective structured clinical examination (OSCE)

---

There were six OSCE stations in all. The five clinical stations were held on different days to the Vivas (OSCE Station 6 held with the vivas). The OSCE stations were:

- Station 1:** Anterior Segment
- Station 2:** Glaucoma and Lid
- Station 3:** Posterior Segment
- Station 4:** Strabismus and Orbit
- Station 5:** Neuro-ophthalmology
- Station 6:** Communication Skills (takes place logistically with viva aspect of the exam)

### 4.1 Results

Table 6: Marks for the OSCE

Statistic	Value	Percentage
Pass mark (using Hofstee method)	119/198	60.1%
Mean score	136.5/198	68.9%
Median score	140/198	70.7%
Range	72 – 188	36.4% – 94.9%
Reliability (Cronbach's alpha)	0.884	
SEM (rounded)	8.95 (9)	4.5%
Final adjusted pass mark (+1 SEM)	128/198	64.6%
Pass rate	14/20	70.0%

Figure 3: Distribution of OSCE scores (red line denotes pass mark)

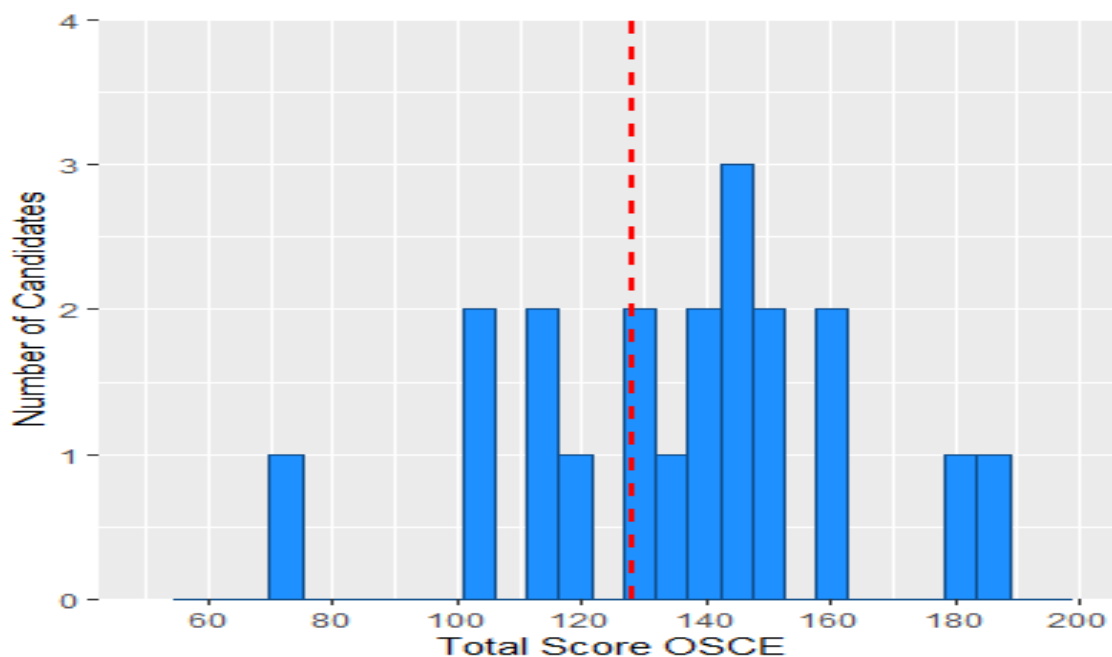


Table 7: Station Summary — OSCE

Station	Category	Maximum Possible	Mean	Median	Min	Max
1	Anterior segment	36	24.1	25.0	6.0	35.0
2	Glaucoma and lid	36	28.7	28.5	18.0	36.0
3	Posterior segment	36	24.8	26.0	12.0	36.0
4	Strabismus and orbit	36	21.4	21.0	7.0	34.0
5	Neuro-ophthalmology	36	26.2	26.5	5.0	36.0
6	Communication skills	18	11.4	11.5	6.0	18.0

Table 8: Correlation between examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Category	Anterior segment	Glaucoma and lid	Posterior segment	Strabismus and orbit	Neuro-ophthalmology	Communication skills
Correlation	0.92	0.78	0.93	0.98	0.89	0.81

Table 9: Mean absolute difference in examiners' marks at each station

Station	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Category	Anterior segment	Glaucoma and lid	Posterior segment	Strabismus and orbit	Neuro-ophthalmology	Communication skills
Mean absolute difference*	1.1	1.1	1.05	0.5	1.3	1.1

\*The 'mean absolute difference' is the average difference between Examiner A and Examiner B scores for each station

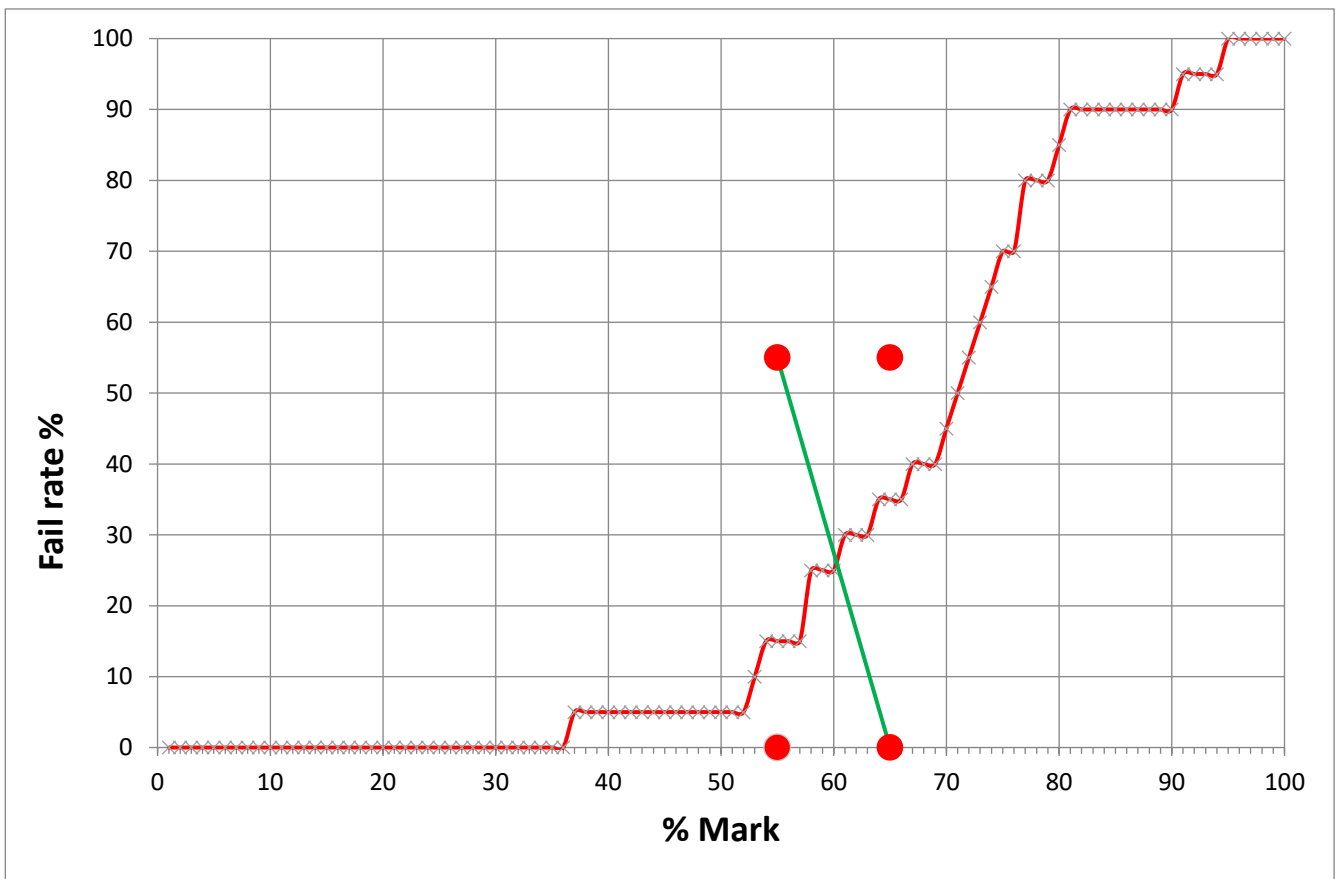


Table 10: Correlation between OSCE stations

	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6
Station 1						
Station 2	0.63					
Station 3	0.45	0.43				
Station 4	0.29	0.26	0.27			
Station 5	0.31	0.14	0.62	0.30		
Station 6	0.56	0.38	0.15	0.54	0.27	

## 4.2 Standard setting for the OSCE

Figure 4: Hofstee plot – OSCE



## 5 Overall results for the oral examination

### 5.1 Results

Table 11: Overall results summary

Statistics	Value	Percentage
Pass Mark	205/318	64.5%
Mean	219/318	68.9%
Median	224.5/318	70.6%
Range	127 – 287	39.9% - 90.3%

To pass the oral examination candidates had to either:

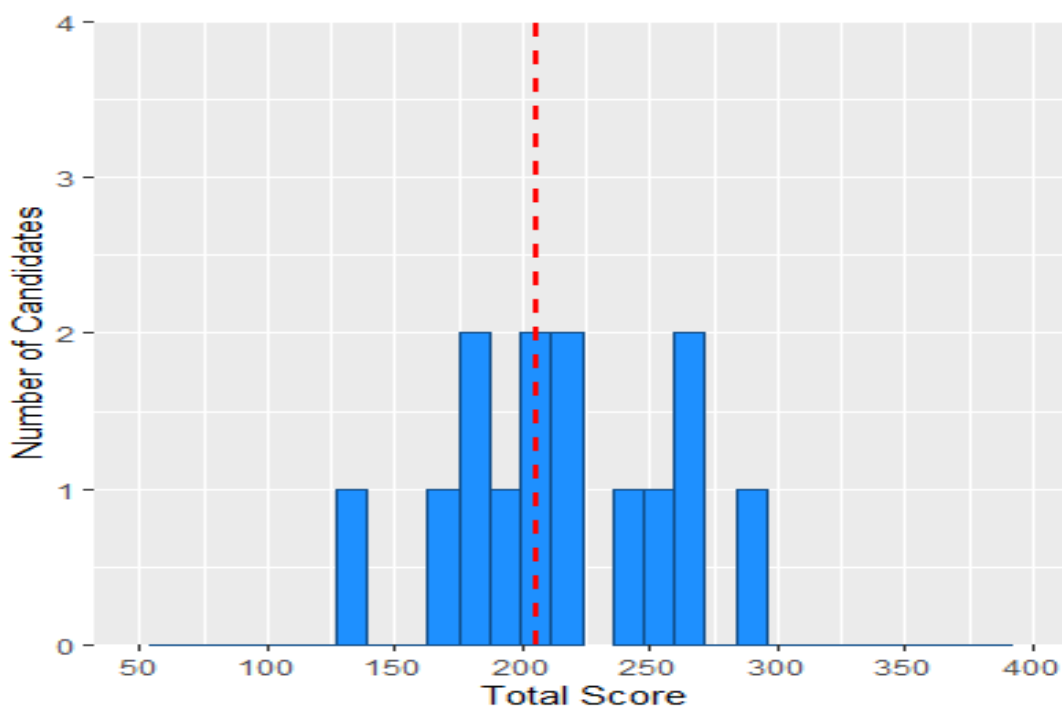
- i) pass both the viva (77/120 (64.2%)) and OSCE (128/198 (64.6% percent)) or
- ii) pass the OSCE, achieve 72/120 in the viva, and achieve  $\geq 205/318$  (64.5 per cent) overall.

Overall, 13 out of 20 candidates passed the Part 2 Oral examination this diet.

Table 12: Pass rates

Statistics	Value	Percentage
Overall pass rate for the oral examination	13/20	65.0%

Figure 2: Distribution of total scores (red line denotes overall pass mark)



## 5.2 Comparison to previous examinations

Table 17: Comparison to previous examinations

Date	Candidates	Viva pass mark	Viva reliability	OSCE pass mark	OSCE reliability	Oral pass rate	Oral pass rate in OST
<b>Jul -23</b>	<b>20</b>	<b>77</b>	<b>0.8</b>	<b>128</b>	<b>0.9</b>	<b>65%</b>	n/a
Apr-23	158	65%	0.7	63%	0.8	61%	86%
Nov-22	120	64%	0.8	60%	0.8	62%	n/a
Apr-22	114	62%	0.7	63%	0.8	68%	91%
Nov-21	119	60%	0.6	61%	0.8	73%	85%
Apr-21	74	62%	0.7	64%	0.8	77%	84%
Mar-21	46	58%	0.8	60%	0.8	70%	94%
Nov-20	86	62%	0.4	64%	0.8	74%	85%
Nov-19	85	67%	0.7	60%	0.8	71%	80%
Apr-19	84	63%	0.6	64%	0.9	64%	79%
Nov-18	106	58%	0.8	64%	0.8	58%	74%
Apr-18	74	62%	0.8	60%	0.8	70%	80%
Apr-17	105	61%	0.8	63%	0.8	66%	82%
Nov-16	107	60%	0.8	63%	0.8	71%	84%
Apr-16	61	63%	0.8	63%	0.9	56%	69%
Nov-15	72	61%	0.8	62%	0.8	69%	86%
Apr-15	77	60%	0.9	60%	0.9	62%	80%
Nov-14	79	63%	0.8	62%	0.7	63%	70%
Apr-14	104	57%	0.8	61%	0.8	58%	65%
Apr-13	109	60%	0.8	63%	0.8	57%	56%
Nov-12	103	58%	0.9	61%	0.8	58%	64%

*The MCQ examination has been de-coupled from the oral examination since April 2014*

Table 18: Cumulative results by deanery (September 2010 to date; not including Nov 22 data)

Country	Deanery	Number of passes	Number of candidates	Pass rate (%)
UK	East Midlands	58	80	73.8
	East of England	74	121	62.0
	East of Scotland	13	14	92.9
	London and KSS (Kent, Surrey and Sussex)	320	420	76.2
	Mersey	65	89	73.0
	North of Scotland	10	18	55.6
	Northwestern	73	118	61.9
	Northern	62	80	77.5
	Northern Ireland	18	23	78.3
	Oxford	50	59	84.7
	Peninsula (Southwest)	26	46	56.5
	Severn	48	62	77.4
	Southeast of Scotland	26	31	83.9
	Wales	47	76	61.8
	Wessex	41	68	60.3
	West Midlands	86	137	62.8
	West of Scotland	42	62	67.7
	Yorkshire	93	141	66.0
OS	Eire	2	3	66.7
	Europe and Overseas	20	49	40.8
		<b>1174</b>	<b>1697</b>	<b>69.2</b>