

# **Examination Report**

Part 1 Fellowship of the Royal College of Ophthalmologists (FRCOphth) Examination

January 2025

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# 1 Summary

The Part 1 Fellowship of the Royal College of Ophthalmologists (FRCOphth) examination took place on the 15<sup>th</sup> of January 2025. A total of 187 candidates sat and completed the examination without issue, of which 93 (49.7%) fulfilled the criteria required to pass the examination overall.

One question was removed from the exam prior to final results calculation, in order to maintain the fairness and quality of the exam. This led to the maximum number of marks for the exam being adjusted to 179 (from 180).

The multiple-choice question (MCQ) exam showed excellent reliability, with an alpha of  $\alpha$ =0.93.

# 2 Multiple choice question (MCQ) paper

The table below gives the paper contents by subject area, compared with previous exam diets / years.

#### Table 1: MCQ paper content

Date of Exam	Anatomy/ embryology	Optics	Pathology	Pharmacology & genetics	Physiology	Miscellaneous	Investigations	Total
Jan-25	28	42	36	13	18	28	14	179*
Oct-24	27	44	33	15	17	28	14	178*
Apr - 24	27	41	35	17	17	26	14	177*
Jan - 24	28	44	35	15	16	30	11	179*
Oct-23	24	48	32	13	17	22	20	176*
Apr - 23	26	48	14	14	13	40	24	179*
Jan-23	26	48	32	14	17	27	16	180
Oct-22	27	32	28	26	22	19	24	178*
Apr-22	27	32	27	26	22	19	21	174*
Jan-22	25	31	28	26	23	19	24	176*
Apr-21	26	32	27	26	23	20	24	178*
Jan-21	27	32	27	17	22	24	20	177*
Oct-20	24	24	23	18	23	8		120
Jan-20	24	24	23	18	23	8		120
Oct-19	24	23	23	18	23	8		119*
Apr-19	24	24	22	18	23	8		119*
Jan-19	22	24	23	18	22	8		117*
Oct-18	24	24	23	18	23	8		120
May-18	24	24	23	18	23	8		120
May-17	24	24	23	18	23	7		119*
Jan-17	24	24	22	18	23	8		119*
Oct-16	24	24	23	18	23	8		120
May-16	24	24	22	18	23	8		119*
Jan-16	24	23	23	18	23	8		119*

\* = questions removed

#### Category groupings

Presented category	Topic of question
Anatomy/ embryology	Anatomy, Embryology
Optics	Optics
Pathology	Immunology, Microbiology, Pathology
Pharmacology & genetics	Pharmacology, Pharmacology and Genetics, Genetics
Physiology	Biochemistry, Cell Biology, Physiology
Investigations	Investigations
Miscellaneous	Statistics, Epidemiology, Unspecified

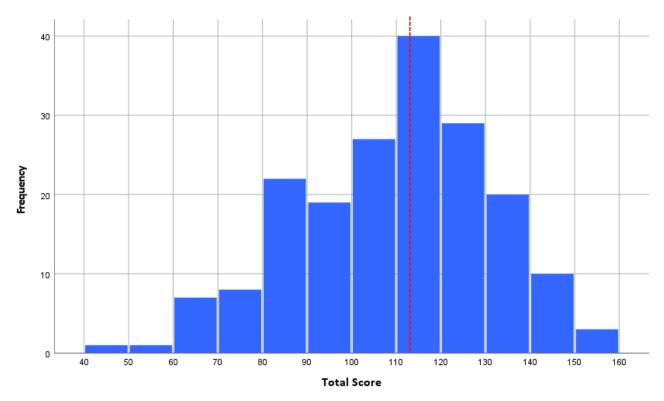
The MCQ paper was lengthened from 120 to 180 questions for the first time in Jan 2021, largely by increasing the number of Investigations and Miscellaneous items, making the breakdown of the two categories' items more important than it has been historically.

## 2.1 Paper statistics

#### Table 2: MCQ paper summary statistics

Statistic	Value	Percentage
Mean score	109.29	61.1%
Median score	112.00	62.6%
Standard deviation	21.55	12.0%
Candidates	187	
Reliability: Cronbach's alpha	0.927	
Standard error of measurement (SEM)	5.82	3.3%
Range of marks	43 – 157	24.0% - 87.7%
Pass mark (Standard set; Rounded)	113 / 179	63.1%
Pass rate	93 / 187	49.7%

#### Histogram showing distribution of total scores – MCQ



The vertical red dotted line denotes the point in the score distribution where the pass mark lies.

## 2.2 Quality of questions

Item analysis data allows us to identify easy, moderate and difficult questions, and those which are good, poor or negative discriminators. Optimally, all questions should be moderately difficult and good discriminators.

				Discrimination (Point Biserial)								
			Negative		Poor		Good			%		
			<0		0-0.249		≥0.250		Total			
		Number	%	Number	%	Number	%					
	Difficult	<25%	3	1.7%	4	2.2%	0	0%	7	3.9%		
Es eiliter	Moderate	25–75%	7	3.9%	48	26.8%	72	40.2%	127	70.9%		
Facility	Easy	>75%	0	0%	13	7.3%	32	17.9%	45	25.2%		
		Total	10	5.6%	65	36.3%	104	58.1%	179	100%		

#### Table 3: MCQ paper quality

### 2.3 Standard setting

The pass mark for the paper was agreed using the Ebel method.

Table 4: MCQ Ebel categories - items per category

	Difficult	Moderate	Easy	Total
Essential	3	29	87	119
Important	5	22	18	45
Supplementary	6	8	1	15
Total	14	59	106	179

The Part 1 FRCOphth subcommittee considered the success of a minimally competent candidate in each category as below:

#### Table 5: MCQ Ebel categories – expert decision

	Difficult	Moderate	Easy
Essential	0.55	0.65	0.75
Important	0.45	0.50	0.55
Supplementary	0.25	0.25	0.25

#### Table 6: MCQ Ebel categories – items per category X expert decision\*

	Difficult	Moderate	Easy	Total
Essential	1.65	18.85	65.25	85.75
Important	2.25	11.00	9.90	23.15
Supplementary	1.50	2.00	0.25	3.75
Total	5.40	31.85	75.40	112.65
Total	5.40	51.85	75.40	Rounded to 113

#### Table 7:Comparison of pass marks and rates for previous MCQ papers

			Reliability				Discrir	nination (I	Biserial)		Facility			
Year	Candidates	Mean	(KR 20)	SEM	Standard	Pass mark	Negativ	Poor	Good	Difficult	Moderate	Easy	Number	Pass number
		score			setting		e	(0- 0.249)	(>0.250)	(<25%)	25-75%	(>75%)	of questions	(rate - rounded)
Jan-25	187	109	0.93	5.82	Ebel	113 (63.1%)	10	65	104	7	127	45	179	93 (50%)
Oct-24	327	114	0.92	5.67	Ebel	108 (60.7%)	7	63	108	5	113	60	178	232 (71%)
Apr-24	269	104	0.89	5.69	Ebel	113 (63.8%)	6	83	88	16	110	51	177	87 (32%)
Jan-24	178	101	0.89	5.83	Ebel	109 (60.9%)	11	77	91	16	118	45	179	69 (39%)
Oct-23	300	100	0.89	5.87	Ebel	110 (62.5%)	13	66	97	14	121	41	176	99 (33%)
Apr-23	224	107	0.91	5.74	Ebel	114 (63.7%)	14	85	80	14	115	50	179	90 (40%)
Jan-23	169	103	0.87	5.88	Ebel	111 (62%)	18	116	46	14	123	43	180	60 (36%)
Oct-22	340	111	0.91	5.67	Ebel	115 (65%)	10	77	91	10	107	61	178	163 (48%)
Apr-22	253	102	0.9	5.76	Ebel	112 (64%)	9	90	75	7	122	45	174	84 (33%)
Jan-22	160	102	0.89	5.73	Ebel	111 (63%)	19	84	73	15	111	50	176	56 (35%)
Apr-21	227	107	0.89	5.73	Ebel	112 (63%)	12	97	69	9	110	59	178	95 (42%)
Jan-21	149	107	0.89	5.63	Ebel	116 (66%)	7	105	65	15	108	54	177	51 (34%)
Oct-20	365	77	0.87	4.56	Ebel	73 (61%)	6	63	51	8	63	49	120	240 (66%)
Jan-20	130	60	0.97	4.54	Ebel	73 (61%)	1	20	99	15	96	9	120	45 (35%)
Oct-19	186	68	0.84	4.67	Ebel	72 (61%)	10	65	44	13	68	38	119	81 (44%)
Apr-19	119	72	0.89	4.7	Ebel	73 (61%)	10	46	63	9	79	31	119	64 (54%)
Jan-19	96	65	0.82	4.68	Ebel	70 (60%)	15	63	39	15	70	32	117	39 (41%)
Oct-18	214	70	0.86	4.84	Ebel	72 (60%)	7	68	45	4	87	29	120	103 (48%)
May-18	119	70	0.83	4.73	Ebel	72 (60%)	15	61	44	9	70	41	120	59 (50%)
May-17	136	69	0.8	4.8	Ebel	75 (63%)	6	63	50	8	89	22	119	45 (33%)
Jan-17	101	64	0.8	NA	Ebel	71 (60%)								

\* For Jan 2021 and subsequent diets, the MCQ paper was lengthened from 120 to 180 questions.

## 2.4 Comparison with previous Part 1 examinations

#### Table 8: Key statistics in previous years

Examination	Candidates	Number passing	% passed (rounded)	MCQ pass mark %	CRQ pass mark %
Jan -25	187	93	50	63.1	N/A
Oct-24	327	232	71	60.7	N/A
Apr-24	269	87	32	63.8	N/A
Jan-24	178	69	39	60.9	N/A
Oct-23	300	99	33	62.5	N/A
Apr-23	224	90	40	64	N/A
Jan-23	169	60	36	62	N/A
Oct-22	340	163	48	65	N/A
Apr-22	253	84	33	64	N/A
Jan-22	160	56	35	63	N/A
Apr-21	227	95	42	63	N/A
Jan-21	149	51	34	66	N/A
Oct-20	369	230	62	61	52
Jan-20	116	53	46	61	52
Oct-19	186	89	48	61	51
Apr-19	119	45	38	61	51
Jan-19	96	37	39	60	50
Oct-18	214	122	57	60	55
May-18	119	64	54	60	54
May-17	136	62	46	63	53
Jan-17	101	38	38	60	51
Oct-16	194	70	36	60	59
May-16	123	61	50	60	56
Jan-16	107	36	34	59	54
Oct-15	188	57	30	59	59
May-15	114	62	54	57	54
Jan-15	89	50	56	58	61
Oct-14	232	102	44	58	57
May-14	119	55	46	58	56

\* For Jan 2021 and subsequent diets, the CRQ paper was removed (and 50 percent more items were added to the MCQ).

Table 9: Comparison over sittings (May 2014 to present)

Sitting	Candidates	Number Passing	Pass rate (%)		
January	1183	483	41		
April May	1703	705	41		
October	2350	1164	50		
Total	5236	2352	45		

# 2.5 Breakdown of results

Table 10: Breakdown of results by deanery

Location	Deanery	Fail	Pass	Total
	East Midlands	1	0	1
	East of England	0	1	1
	East of Scotland	1	0	1
	Kent, Surrey and Sussex	1	3	4
	London	2	0	2
	Mersey	0	0	0
	North of Scotland	0	0	0
	North Western	1	4	5
	Northern	1	3	4
UK	Northern Ireland	3	2	5
	Oxford	1	2	3
	Peninsula (Southwest)	0	0	0
	Severn	0	1	1
	South East of Scotland	1	4	5
	Wales	1	1	2
	Wessex	2	0	2
	West Midlands	2	1	3
	West of Scotland	0	0	0
	Yorkshire and Humber	0	2	2
Overseas	Eire	0	1	1
Overseas	Europe and Overseas	1	1	2
Other	Not applicable / Unknown	76	67	143
	TOTAL	94	93	187

# Appendix 1: Overall results for each deanery

The summary results of cumulative data for each deanery are listed below.

#### Table 11: Cumulative pass by deanery

Location	Deanery	Total candidates passed	Total candidates sitting	Pass rate %
UK	East Midlands	61	145	42.1
	East of England	87	183	47.5
	East of Scotland	24	39	61.5
	Kent, Surrey, and Sussex	79	146	54.1
	London	223	431	51.7
	Mersey	59	140	42.1
	North of Scotland	26	55	47.3
	North Western	67	128	52.3
	Northern	63	119	52.9
	Northern Ireland	41	96	42.7
	Oxford	42	70	60.0
	Peninsula (Southwest)	39	86	45.3
	Severn	27	52	51.9
	South East of Scotland	30	50	60.0
	Wales	64	136	47.1
	Wessex	61	142	43.0
	West Midlands	116	255	45.5
	West of Scotland	68	138	49.3
	Yorkshire & Humber	91	169	53.8
Overseas	Eire	18	66	27.3
	Europe and Overseas	101	230	43.9
Other	Not applicable / Unknown	462	1061	43.5
	TOTAL	1849	3937	47.0