OCR

RECOGNISING ACHIEVEMENT

FSMQ

Foundations of Advanced Mathematics (MEI)

Free Standing Mathematics Qualification **6989**

OCR Report to Centres

January 2013

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, Cambridge Nationals, Cambridge Technicals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

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This report on the examination provides information on the performance of candidates which it is hoped will be useful to teachers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding of the specification content, of the operation of the scheme of assessment and of the application of assessment criteria.

Reports should be read in conjunction with the published question papers and mark schemes for the examination.

OCR will not enter into any discussion or correspondence in connection with this report.

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OCR REPORT TO CENTRES

Foundations of Advanced Mathematics – 6989

There were just over 500 entries for this series. The mean mark was 27.1. The minimum mark scored by one candidate was 6 and eight candidates scored the maximum mark of 40.
In 22 questions at least one candidate offered no answer and in some cases there were quite a number of such omissions. These were scattered throughout the paper so this did not provide any evidence that candidates found the paper too long.

In all questions each of the distracting answers was selected by at least one candidate.

On this paper there was no question where the wrong response was selected by more candidates than the right response, but in 7 questions fewer than 50% chose the correct response.

As in previous series here is a summary of questions and topics with the approximate percentage of candidates giving the correct responses. From this table can be seen the questions for which the correct response was selected by fewer than half the candidates.

	Question	Topic
91 – 100%	2	Arithmetic – conversions
	3	Probability
81 – 90%	6	Arithmetic – fractions
	10	Arithmetic – ratios
	11	Graphs – distance-time graph
	12	Arithmetic – order of operations and indices
	17	Statistics – interpretation of bar chart
	21	Algebra – factorisation of quadratic expressions
	32	Arithmetic – standard form
	37	Statistics – range
	38	Statistics – random sampling
71 – 80%	5	Algebra – solution of inequalities
	9	Algebra – solution of equations
	15	Algebra – changing the subject of formulae
	20	Algebra – solution of simultaneous equations
	28	Statistics – interpretation of table, mean and range
	35	Statistics – interpretation of table, median and range
	39	Algebra – indices
61 – 70%	1	Arithmetic
	7	Arithmetic – interpretation of large numbers
	14	Graphs – coordinates
	16	Algebra – construction of formula
	19	Graphs – conversion graph
	23	Arithmetic – reasonable units
	25	Algebra – solution of a quadratic equation by formula
	34	Statistics – probability and pie chart
	36	Statistics – averages

51 – 60%	13	Trigonometry
	18	Arithmetic – error bounds
	26	Algebra – sequences and equations
	27	Graphs – interpretation of cubic curve
	29	Trigonometry – 3D problem
	40	Graphs – construction of quadratic function for curve.

41 – 50%	4	Mensuration
	8	Algebra – addition of algebraic fractions
	22	Vectors
	24	Probability
	30	Graphs – construction of equation for a straight line
	31	Vectors
	33	Trigonometry

Answers.

1	B	21	C
2	D	22	B
3	C	23	A
4	D	24	B
5	C	25	A
6	C	26	A
7	A	27	C
8	C	28	C
9	C	29	C
10	C	30	B
11	B	31	C
12	A	32	A
13	C	33	B
14	B	34	D
15	D	35	A
16	C	36	D
17	D	37	B
18	A	38	C
19	D	39	B
20	D	40	D

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