

THE INSTITUTE OF CARPENTERS



2005 Examinations Report

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Introduction

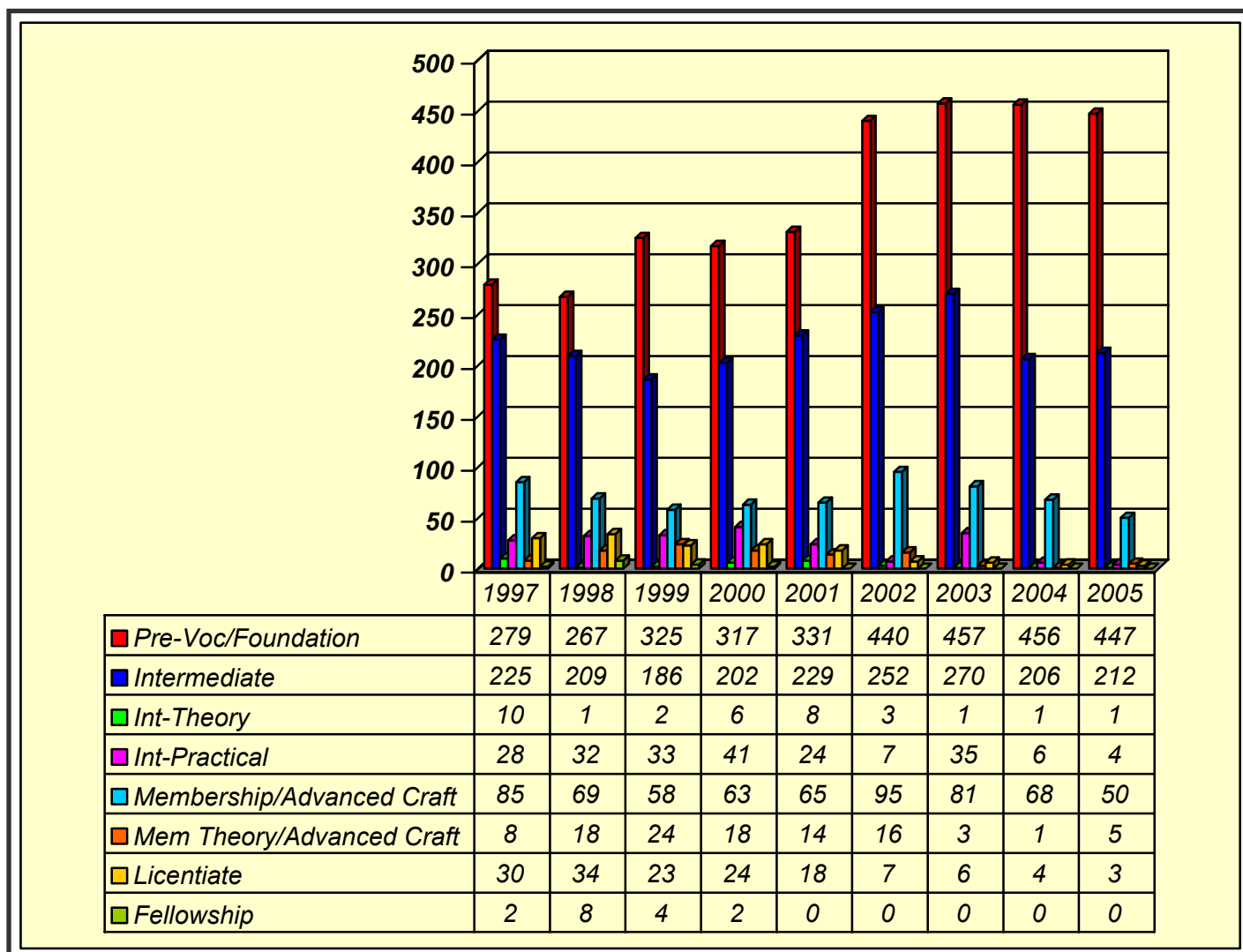
After the completion of the 2005 May/June examinations, the Institute has published this year's report based on the candidates' achievements and the comments from the Examiners on how each question was answered, as well as comments on the respective practical tasks.

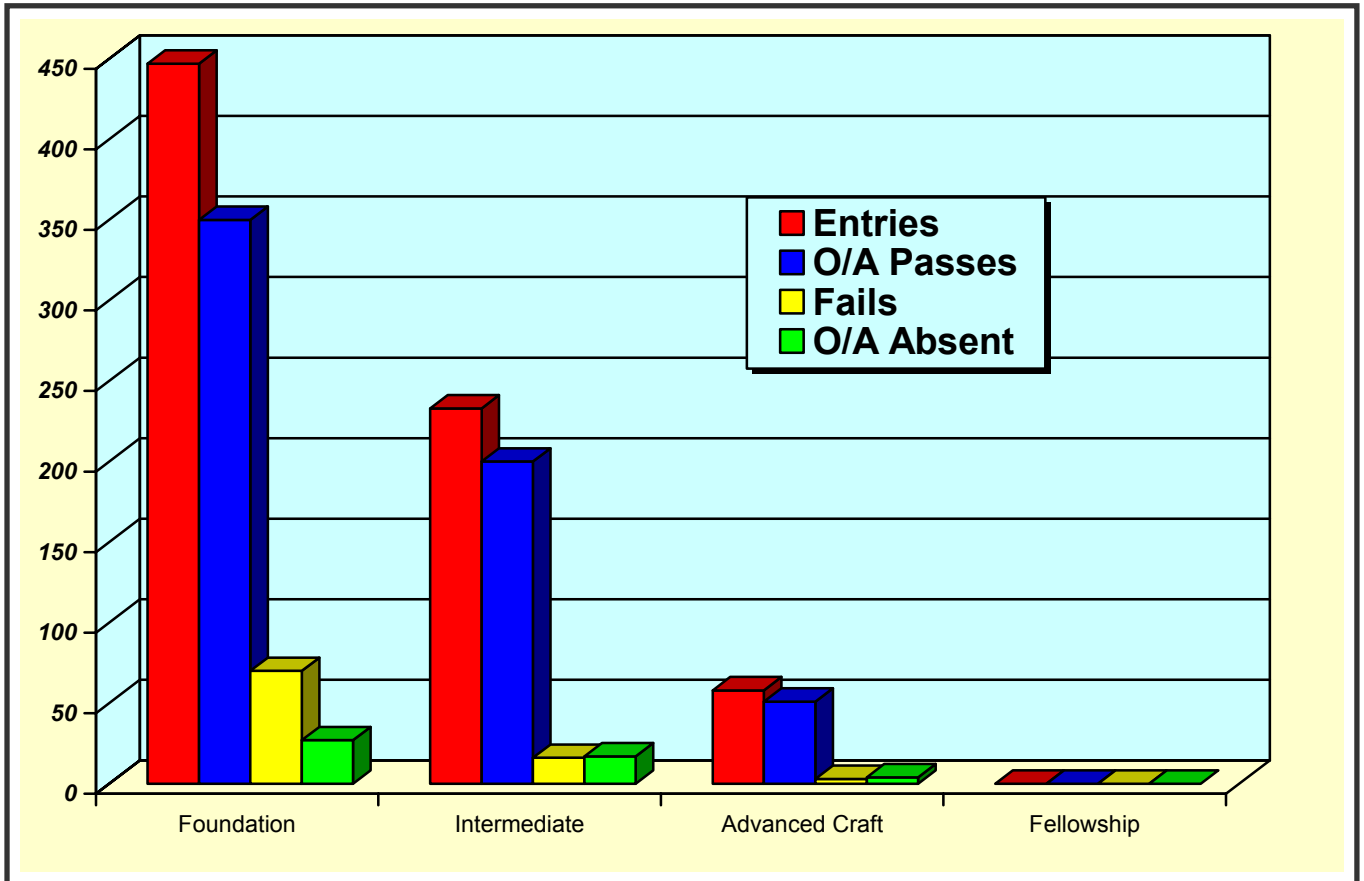
The syllabus for each examination is designed to cover all the current topic areas contained in NVQ/ICA/SNVQ courses, which most candidates are following at their respective colleges/centres. Students who enter the examinations must be aware that additional topics are contained within the Institute's current syllabus (copies available on the website), **which are not** included in the NVQ/ICA/SNVQ units.

This was evident in questions which required a good understanding of geometrical principles and general sketch drawing. Candidates had difficulty in illustrating answers with clear and accurate details of components, diagrams, plans and elevations.

Furthermore, it has been noticed that many candidates taking the Institute's examinations each year have limited knowledge of a number of these additional topic areas. Candidates **must** therefore be encouraged to undertake self-study to enhance their knowledge prior to taking the Institute's examinations. Past papers are available for revision, on the website.

Below is an indication of the number of entries per year from 1997.





Number of entries in 2005 for each exam, and the number of passes.

The diagram above shows the total number of entries for the 2005 examinations, which was **722**. Indicating again, a drop in overall entries compared to the figure of **742 for 2004**.

However there was a slight increase in entries for the intermediate, and the Advanced craft theory exams.

Colleges/Centres are informed that students who were unsuccessful in the Advanced Craft or Intermediate examinations, or who wish to gain full membership status may enter the December examination. The Foundation examination is available in February and May.

For the fifth year running, no entries were received for the Fellowship Examination.

Entries for the Setting-Out in Joinery and Shopfitting course were received from the Community College Shoreditch, who ran a successful short course in May/June.

It is imperative that colleges/centres ensure that completed entry forms for any of the Institute's examinations arrive at Central Office before the closing date for entries. (Exam dates are available via the website)

Additionally, practical mark sheets, and completed theory papers need to be received as soon as possible after the examination. Postponement can lead to a candidates results being delayed.

Further information on running any of the Institute's examinations can be obtained through Central Office.

Foundation Examination

This examination was the first of the 2005 series with the Practical element being held between the 23rd to 27th May and the Theory paper on 25th May.

Three practical assignments, which are set by the Institute and marked at the centres, were repeated again this year. They included a simple task of mortise and tenon joints, a frame with halving joints and finally a small drawer constructed using dovetail joints.

There is no time limit on the tasks but they need to be completed within one academic year. They have been generally accepted well by the centres as an alternative to coursework.

The practical assignment marks needed to be submitted by June 20th. Yet again it was found that a few centres submitted their candidates' results later than the designated date, which has led to a delay in calibrating results onto the computer.

Centres must send the final results as soon as possible, after the final assignment, to Central Office to avoid any delays.

With reference to the practical assignments, at a recent Examinations Board meeting discussions took place to replace the current tasks.

This is to avoid repetition, and has agreed to provide three new practical assignments from ***September 2006***.

The number of passes in this examination was slightly lower than in 2004, at 83%.

The practical job this year was a small nail-box to include housing joints and a cross-halving joint on the divisions. The handle and ends of the box required the candidate to shape and fix with screws as well as nailing on the base.

The response from the centres indicated that the practical task was fair and achievable within the time allocated.

Comments received from some centres include:-

David Simpson/Noel Hall – Acton & West London College

Generally a good standard of work – varying levels of quality, otherwise a good practical job.

Alan Chapman – Cleeve Park School (Under 16 – years 10 & 11)

Mainly a test of accurate measuring, time very tight – a real rush towards the end. Good to see a complete product.

Jeremy Ridley – Crawley College

Overall an interesting task for them to make with nearly all completing the project.

Mark Hanslow – Harrogate College

Good practical testing task.

Anthony Davies – Redbridge College

Simple but effective.

Barry Williams – Weston College

Good interesting practical task that students found enjoyable.

The Theory paper consists of 40 questions and requires the candidate to complete each question with a short answer or sketch within a 90-minute period. Listed below are the comments from the examiners who undertook the marking of these papers.

Q1,	<u>Sash cramp</u>	Overall good answers, although some had difficulty with correct name and uses.
Q2,	<u>Parts of a tree</u>	Good answers, some mixed up heartwood with sapwood.
Q3,	<u>Electric plug</u>	Good answers, a few gave wrong colours.
Q4,	<u>Formwork</u>	Lack of knowledge regarding use of. Although a few answered correctly.
Q5,	<u>Floor</u>	Satisfactory answers. Most could identify skirting. Some mentioned joists instead of wall-plate, brickwork instead honey-comb wall.
Q6,	<u>Datum marks</u>	Good answers, chalk line mentioned a few times.
Q7,	<u>Site management</u>	Overall correct answers.
Q8,	<u>Drawing symbols</u>	Confusion over broken line and centre line.
Q9,	<u>2nd Fixing</u>	Good answers.
Q10,	<u>Preservative</u>	Good answers.
Q11,	<u>Dowel joint</u>	Satisfactory. Dowel often placed in wrong place.
Q12,	<u>Conditioning</u>	Many did not understand the reason. Few could give a sequence.
Q13,	<u>Conversion</u>	Satisfactory. Most candidates could answer correctly.
Q14,	<u>Frame head</u>	Not very well answered, even though correct position of tenon was indicated.
Q15,	<u>Dry rot</u>	Fairly well answered, not many gave the four suggestions.
Q16,	<u>Screw head</u>	Odd names given to this type of screw-head, including cheese-head.
Q17,	<u>Adhesives</u>	Well answered.
Q18,	<u>Lengthening joint</u>	About 50% could answer correctly.
Q19,	<u>Nail</u>	Fairly good answers but some poor sketching.
Q20,	<u>Manufactured board</u>	Well answered.
Q21,	<u>BSI & double insulated symbols</u>	Good answers, but some did not know double-insulation.
Q22,	<u>Calculation</u>	Fairly good, but some placed the decimal point in the wrong place.
Q23,	<u>Projections</u>	Poor answers, few could identify both.

Q24, <u>Working with other trades</u>	Good answers.
Q25, <u>Triangulation</u>	Satisfactory answers.
Q26, <u>Chisels</u>	Well answered.
Q27, <u>Casement stay</u>	Good answers, some poor sketches.
Q28, <u>Types of saws</u>	Good answers, but ‘hacksaw’, ‘bandsaw’ and power tools were included.
Q29, <u>Softwood species</u>	Fairly good, pine, beech and evergreen were mentioned a lot.
Q30, <u>Roof types</u>	Fairly good, few did not know a collar roof – most knew lean-too.
Q31, <u>Sill</u>	Satisfactory answers, many did not know what item ‘A’ was for.
Q32, <u>Foundations</u>	Some good answers, some were very short.
Q33, <u>Octagon in a square</u>	Poor answers, rough sketches. But some correct answers.
Q34, <u>Sequence of operations</u>	Good answers overall.
Q35, <u>Safety</u>	Most answered correctly.
Q36, <u>Oil stone</u>	Satisfactory answered by most.
Q37, <u>Door lining</u>	Poor sketches, most did not understand horizontal plan section.
Q38, <u>House construction</u>	Well answered.
Q39, <u>Roof members</u>	Most students could answer this question, although some mix up with jacks, wallplate and hip.
Q40, <u>Shelving</u>	Good answers some poor sketches.

Overall most students found the paper to be reasonable and capable of completing within the 90 minutes. It was noticeable however, that some students did not read or understand some questions properly. Sketching and explanations by the students need to be improved. Past papers are available for downloading off the website.

The Intermediate Examination

The Intermediate examination took place during the week of 13th to 17th June and consisted of a practical and theory paper. The practical task allows the students a choice between site work or bench work.

Carpentry task – consisted of the setting-out and construction of a small semi-circular arch. The candidates were required to fix only nine laggings, they were allowed to use power tools for cutting the curves before finishing shaping.

Overall most students completed within the time.

Comments from centres include:-

Ian Christison – Highlands College Jersey
A good test in all respects, timing especially.

Stephen Parry – North West Kent College
Some bad mistakes were made – two candidates set out an ellipse and some others mis-measured.

Bench Joinery task – involved the construction of part of a cupboard unit including dovetails, pocket screws etc.

Some mistakes were made by candidates, but most completed in the time allocated.

Ian Christison – Highlands College Jersey
Two marks allocated for one pocket screw!

Stephen Parry – North West Kent College
Basic mistakes were made by most candidates.

Owen McKoy – Reading College
Lap thickness on dovetail ought to be specified, also detail of twin mortise and tenon joint on internal rail.

The theory paper was taken on 14th June and consisted of 20 questions to be attempted within a period of 90 minutes. Most students completed the paper within the time period and submitted them for marking. Listed below are the examiners' comments.

Q1,	<u>Moisture content</u>	Reasonably good answers. Some odd moisture contents were given.
Q2,	<u>Repair</u>	Fairly good answers but some poor sketches.
Q3,	<u>Type of hinge</u>	Some good answers.
Q4,	<u>Safety</u>	Good answers.
Q5,	<u>Preservative</u>	Good answers.
Q6,	<u>Dead shore</u>	Few understood what dead shoring was. Not many could give examples.
Q7,	<u>Floor boarding</u>	Poor sketches, poor details.
Q8,	<u>Scaffolding</u>	Good answers given.

Q9, <u>Boxing-in</u>	Fairly good answers, but poor sketches and details.
Q10, <u>Geometry</u>	Fairly well answered, although some had problems with obtaining compass position.
Q11, <u>Adhesives</u>	Some good answers, but some indicated it as an exterior glue. few mentioned it sticking on contact.
Q12, <u>Door frame</u>	Poor sketches, no mention on keeping frame square. Some mentioned plugs and screws, or wooden plugs even though the frame was to be built in as the brickwork proceeded.
Q13, <u>Ironmongery</u>	Good answers.
Q14, <u>Calculation</u>	Good answers by majority of students.
Q15, <u>Screw head types</u>	Good answers, some problems with raised head screw.
Q16, <u>Stairs</u>	Some correct answers, although some confusion over question.
Q17, <u>Defects</u>	Good answers.
Q18, <u>Formwork</u>	Poor sketches, lack of understanding on how to cast the stone.
Q19, <u>Gauges</u>	Good answers.
Q20, <u>Roof trusses</u>	Poor answers and sketches. Lack of knowledge regarding truss rafters and fixing.

Overall a reasonable paper with most questions attempted by the candidates. However, being able to answers by sketching or writing is still a problem with some candidates.
Past papers are available from the website.

Advanced Craft Examination

The Advanced Craft theory examination was taken on 15th June, with the practical examination between 13th and 17th June, and is offered to successful candidates who wish to become members of the Institute.

The theory paper is made up of parts “A” and “B” to be completed in a period of 3 hours. Paper “A” has a total of 18 questions with part “B” consisting of 8 questions with only 4 needing to be attempted.

The practical paper gave candidates a choice between a Joinery practical or a Carpentry practical, both with a time period of 7 hours.

The Joinery paper this year was part of door frame and door which included mortise and tenon joints. Some of the timber was pre-rebated for the candidates. The task involves stopped chamfers and fixing of beading to receive a panel above the transom.

No comments were received from the centres.

The Carpentry task involved the construction of a gabled ended splayed roof which required the candidates to set-out full-size to obtain the correct lengths and bevels.

Again no comments were received from centres, so we must assume there were no problems and candidates completed in the time allocated.

Part “A” of the theory paper was reasonably answered although part “B” again proved too hard for some candidates. Below are the examiners' comments.

Part “A”

Q1,	<u>Door ironmongery</u>	Good answers, some struggled to get seven items.
Q2,	<u>Turning piece</u>	Some good answers. Lack of understanding of purpose of camber.
Q3,	<u>Stair</u>	Well answered, good understanding of items.
Q4,	<u>Calculation</u>	Most answered correctly.
Q5,	<u>Conversion</u>	Good answers.
Q6,	<u>Floor construction</u>	Lack of knowledge for purpose of folding wedges between wall and joist. Otherwise good answers.
Q7,	<u>Roof geometry</u>	Fairly good answers, some lack of knowledge regarding geometry required.
Q8,	<u>Dry rot</u>	Good answers, some omitted regarding use of plastic bags when removing from building.
Q9,	<u>Door schedule</u>	Well answered by most students.
Q10,	<u>Formwork</u>	Poor sketches, lack of knowledge.
Q11,	<u>Datum points</u>	Part ‘A’ well answered, but part ‘B’ proved more difficult for some candidates.
Q12,	<u>Cartridge operating tools</u>	Fairly good answers, but not many mentioned test piece or using weakest cartridge first.
Q13,	<u>Fire resisting door</u>	Poor answers with part ‘A’.
Q14,	<u>Shoring</u>	Good answers.
Q15,	<u>Geometry</u>	Most answered correctly.
Q16,	<u>Woodwork machinery</u>	Good answers.
Q17,	<u>Door lining</u>	Well answered some poor sketches.
Q18,	<u>Windows</u>	Some good answers and some poor sketches.

Part “B”

Part “B” of the Advanced Craft examination consists of eight questions with only four needing to be attempted by candidates. However, it was found by the examiners that one candidate had in fact attempted five.

Another gave one of his answers on two separate pieces of paper mixed in with another answer from another question. However, this did not affect his marks.

Students did find part “B” difficult and few were unable to provide acceptable notes and sketches. Below are the comments by the examiners of paper “B”.

- Q1, Power tools
Poor sketches with mention of tread and riser when an open riser was ask for. Not many described the guide. Part ‘B’ fairly well answered.
- Q2, Dormer roof
Some candidates had problems with this question and could not give enough information. Problems with the use of scale rules and details.
- Q3, Calculating timber
No one got the complete answer – often decimal point in the wrong place.
- Q4, Timber connectors
Poor information and sketches.
- Q5, Door screen
Some poor sketches and information, most had an idea of what was required.
- Q6, Roofs
Reasonable answers, not many mentioned truss clips – some mentioned nailing.
- Q7, Bay window
No comments submitted as no candidate attempted this question.
- Q8, Raking shore
Fair answers with reasonable sketches.

From the comments above for paper ‘A’ and paper ‘B’ it does indicate that some students find paper ‘B’ the more difficult to attempt even though they are given a choice of 8 questions with only 4 to attempt within a time of two hours. That leaves about 30 minutes per question. The majority of students attempting these two papers would be completing a level 3 NVQ/SNVQ or similar and may not be familiar with detailed answers, particularly paper ‘B’. It is for this reason that the candidate must be encouraged to revise and prepare more for this examination, i.e. improving drawing and sketching skills, revising using past papers etc.

Past papers are available from the website.

Fellowship Examination

The Fellowship examination is offered to candidates who usually wish to upgrade from Member level. However, in some circumstances the Fellowship award can be offered to candidates at the discretion of the Examination Board. The examination consists of two theory papers only. The first paper is compulsory, is entitled “Organisation and Supervision”, and deals with workshop and site skills of the Foreman/woman. With the second paper the candidate has a choice between Carpentry and Joinery. All papers contain 8 questions which require only 6 to be answered within a period of 3 hours each. The examination was available between 13th and 17th June; unfortunately there were no entries again this year.

Summary

Once again the results and comments have shown that it is clearly obvious that a number of points certainly **still** need to be improved.

The majority of candidates who entered the Institute's exams certainly need to be more prepared for entry. More emphasis need to be put towards **a better understanding of drawing and geometry**, timber section sizes, wood machining, calculations and in some cases a better understanding of timber technology etc.

As always the Institute is prepared to support examination centres with regards to schemes of work, suggested practical pieces etc, all of which can be obtained through Central Office, or emailing me through the website if I can be of any assistance.

It's a pity that the number of candidates seems to be going down each year and I would like to ask more colleges to try and enter their students for the Institute's examinations.

Funding is available to colleges (see website for details) who wish to participate in maintaining our qualifications.

Chris Tooke
Chief Examiner *August 2005*



INSTITUTE OF CARPENTERS

2005 - Prize Awards

<u>College</u>	<u>Candidate</u>	<u>No</u>	<u>Award</u>
Foundation Examination			
Acton and West London College	Alan Davis	05FM016	1 st (Endorsed Certificate)
Chesterfield College	James Shawcroft	05FM168	2 nd (Endorsed Certificate)
Reading College	Paul Wilson	05FM441	3 rd (Endorsed Certificate)
Intermediate Examination			
Reading College Certificate	Bryan Gilbey	05IC157	1 st £50 plus Endorsed
Community College Shoreditch	Christopher Amey	05IC044	2 nd £35 plus Endorsed Certificate
Advanced Craft Examination			
Community College Shoreditch	Michael Halewood	05ACC010	Highest o/a Theory & Practical marks in the Advanced Craft Examination. £50, Endorsed Certificate plus Medal. College awarded Advanced Craft Examination Shield.
Reading College	Kaye Gould	05ACC034	2 nd highest o/a Theory & Practical marks in the Advanced Craft Examination. £35 plus Endorsed Certificate.
Reading College	Ian Reichelt	05ACC042	Highest Theory mark in the Advanced Craft Exam. Endorsed Certificate plus Medal. Alf Emary Cup Awarded to College.
Community College Shoreditch	Michael Halewood	05ACC010	Highest Practical marks In the Advanced Craft Examination. Endorsed Certificate plus medal. Ken Hewett Shield Awarded to College.

2005 Theory Paper Examiners

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Mr P Burgess MIOC	East Midlands	Mr R Cooper MIOC	East Midlands
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A special thank you to all who offered their services in preparing and marking the examination papers.

C R Tooke
Chief Examiner August 2005

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