

THE INSTITUTE OF CARPENTERS



2003 Examinations Report

Examination Board Chairman

Mr D. Riley M.I.O.C.

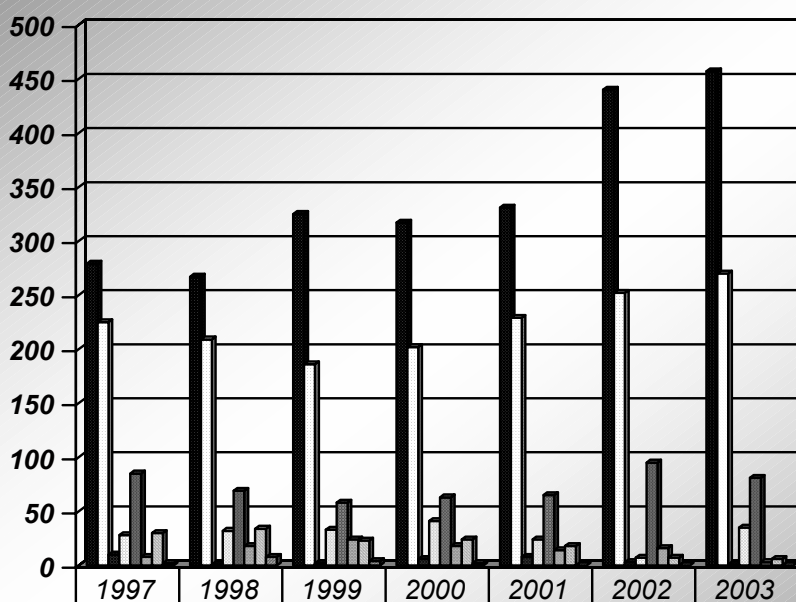
Chief Examiner

Mr C. R. Tooke F.I.O.C.

Introduction

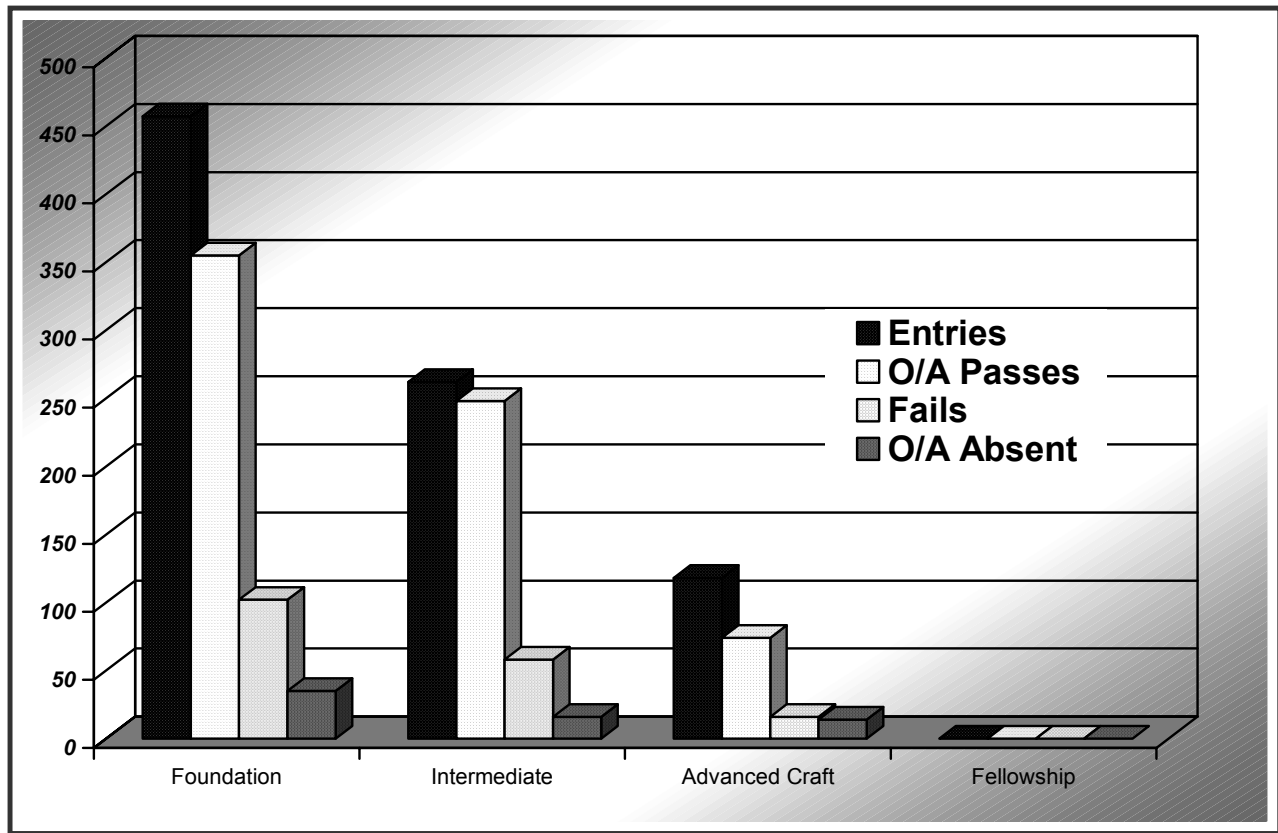
Every year after the completion of the May/June examinations, the Institute publishes a report based on the candidates' achievements and the comments from the Examiners on how each question was answered, as well as comments on the respective practical tasks. The syllabus for each examination is designed to cover all the current topic areas contained in NVQ/ICA/SNVQ courses, which most candidates are following at their respective colleges. Students who enter the examinations must be aware that additional topics are contained within the Institute's current syllabus, **which are not** included in the NVQ/ICA/SNVQ units. Once more, 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 Institutes examinations each year have limited knowledge of a number of these additional topic areas. Candidates **must** be encouraged to undertake self-study to enhance their knowledge prior to taking the Institute's examinations.

No. of entries
1997 to 2003



■ <i>Pre-Voc/Foundation</i>	279	267	325	317	331	440	457
□ <i>Intermediate</i>	225	209	186	202	229	252	270
■ <i>Int-Theory</i>	10	1	2	6	8	3	1
□ <i>Int-Practical</i>	28	32	33	41	24	7	35
■ <i>Membership/Advanced Craft</i>	85	69	58	63	65	95	81
■ <i>Mem Theory/Advanced Craft</i>	8	18	24	18	14	16	3
■ <i>Licentiate</i>	30	34	23	24	18	7	6
■ <i>Fellowship</i>	2	8	4	2	0	0	0

Number of 2003 entries for each exam and number of passes.



The total number of entries for the 2003 examinations was **853** indicating yet again a continuous growth in overall entries compared to the figure of 820 for 2002. However there was a drop in entries for the Advanced Craft exam. This year once again, also saw no entries for the Fellowship Examination although there were papers available.

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 now available, on a permanent basis, twice a year.

Entries for the Setting-Out in Joinery and Shopfitting course have not been included in this report, unfortunately due to no courses being run.

Further information on running this course can be obtained through Central Office.

Foundation Examination (formerly Pre-Vocational)

This examination was the first of the 2003 series with the Practical element being held between the 19th to 23rd May and the Theory paper on 21st May. The course-work assessment element needed to be submitted by June 14th. Yet again it was found that a few colleges submitted their candidate's results later than the designated date which led to

a delay in calibrating results onto the computer. Please note that from **September 2003**, a total of **3 practical assignments** will replace the coursework assessment sheet. These must be completed for each student entered for the Foundation Examination. Further information regarding the new assessment can be obtained by contacting Central Office.

The number of passes in this examination was lower than in 2002 at 77%.

The Practical job this year was a bracket/coat hook which required limited setting-out to obtain the angles etc. Comments from examination centres stated that the piece was challenging, causing the students to struggle, and in some cases the time allowed was insufficient, meaning some students did not complete the task.

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>Parts of a tree</u>	Fairly well answered, a few mistakes.
Q2,	<u>Recommended power supply</u>	Overall good answers. Some mentioned 240 Volts
Q3,	<u>Ledged, braced & batten door</u>	Minority placed the braces wrong side.
Q4,	<u>Adhesive</u>	PVA adhesive was common answer.
Q5,	<u>Bisecting a line</u>	Lack of knowledge regarding bisecting a line.
Q6,	<u>Types of woodmachines</u>	Question not read properly. Power tools mentioned a lot. However, some correct answers.
Q7,	<u>Calculation</u>	Answers overall good, although decimal point in wrong place was common.
Q8,	<u>Storage</u>	Quality of answers varied from good to not understanding question.
Q9,	<u>Grinding/honing angles</u>	Poor answers. Lack of knowledge regarding grinding and sharpening angles.
Q10,	<u>Purchasing nails</u>	Reasonably answered on each aspect of the question.
Q11,	<u>Hard or soft woods?</u>	Well answered, occasional mix up with coniferous, deciduous and cone bearing.
Q12,	<u>Butt hinge</u>	Few good sketches, not very good explanations.
Q13,	<u>Changing abrasive paper</u>	Some brief explanations, others hard to follow.
Q14,	<u>Door frame/lining joints</u>	Mostly only one part attempted.
Q15,	<u>Stormproof window</u>	Most did not have knowledge of a stormproof window.

Q16, <u>Hardwood lippings</u>	Most misunderstood question.
Q17, <u>Roof members</u>	Part A well answered, problems with part B.
Q18, <u>Ladder regulations</u>	Well answered.
Q19, <u>Spirit level</u>	Most gave satisfactory answers.
Q20, <u>Formwork</u>	Lack of knowledge of formwork. Poor sketches.
Q21, <u>Fuse & transformer</u>	Generally well answered.
Q22, <u>Timber calculation</u>	Well answered, few mistakes.
Q23, <u>Uses for architrave & skirting</u>	Some good answers, others did not know purpose.
Q24, <u>Types of handsaws</u>	Majority good answers, points not known by a few.
Q25, <u>Dovetail joint</u>	Not many fully answered correctly.
Q26, <u>Colour coding for electric cable</u>	Old colour codes often used.
Q27, <u>Door parts</u>	Frieze rail not named in majority of cases. Door frame Terms often were used. Some acceptable answers.
Q28, <u>Types of windows</u>	Poor sketches. Some good answers.
Q29, <u>Ground floor construction</u>	Most only recognised the skirting part. Lack of knowledge on floor construction.
Q30, <u>Rafter & wallplate joint</u>	Wrong names, few correct answers.
Q31, <u>Parts of a circle</u>	Good answers, some mix up with names, poor sketches.
Q32, <u>Safety with adhesive</u>	Some good answers, a lot misunderstanding the question.
Q33, <u>Jointing floorboards</u>	Good answers.
Q34, <u>Moisture content formula</u>	Few attempted question due to lack of knowledge.
Q35, <u>Indicate rebate & groove</u>	Often measurements were wrong.
Q36, <u>Types of screwdrivers</u>	Good answers.
Q37, <u>Shrinkage plate</u>	Very few reasonable answers. A lot suggested used in cupboard construction, or a wall bracket.
Q38, <u>Door frame</u>	Well answered by majority although a few only showed a brace at the bottom.
Q39, <u>Names of operatives</u>	Reasonable good answers.
Q40, <u>Identifying blockboard</u>	Not well answered, other manufactured board names often used.

The Intermediate Examination

The Intermediate examination took place during the week of 9th to 13th June and consisted of a practical and theory paper. The practical task this June was part of a counter screen with sash. The outer frame required dovetailed joints in the corner with a groove on the inner face to receive the sash. Also included were glazing bars which required halving joints where they crossed. Comments from centres were positive although some candidates did find the task difficult but challenging, and struggled to complete in the time allocated. Furthermore, rebate sizes were under and some students did not understand the importance of marking out first.

The theory paper was taken on 10th 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>Types of hinges</u>	Sketches poor, descriptions varied.
Q2, <u>Sliding sash window</u>	Very few correct answers.
Q3, <u>Timber defects</u>	Poor sketches, reasonable answers.
Q4, <u>Safety ware</u>	Fairly good answers.
Q5, <u>Section of tree trunk</u>	Terminology mixed up.
Q6, <u>Sliding door gear</u>	Poor answers. Bad sketches, no mention of adjustment.
Q7, <u>Types of casement windows</u>	Poor details, lack of knowledge.
Q8, <u>Floor calculation</u>	Good answers, but some silly mistakes.
Q9, <u>Types of adhesives</u>	Some good answers, lack of knowledge on types used.
Q10, <u>Ledged & braced door</u>	Brace wrong side, some gave a description for framed ledged and braced door.
Q11, <u>Manufactured boards</u>	Reasonably well answered.
Q12, <u>Wood boring insects</u>	Good answers overall.
Q13, <u>Staircase parts</u>	Confusion with pitch line and margin line. Few answered part b, formula for stair tread.
Q14, <u>Circular saw</u>	Fairly well answered, part C proved difficult.
Q15, <u>Storage</u>	Fair answers, poor sketches and descriptions.
Q16, <u>Scale rule & segmented arch</u>	Parts a & b well answered. Lack of knowledge on bisecting.
Q17, <u>Storey frame</u>	Well answered but names often mixed up.

Q18, <u>Portable power tools</u>	Well answered by most students.
Q19, <u>Formwork</u>	Lack of knowledge regarding formwork proved difficult for most students. Poor sketches.
Q20, <u>Floor joist layout</u>	Names of joists were mixed up. Various different floor layouts. Most did not answer part b correctly.

Advanced Craft Examination

The Advanced Craft theory examination was taken on 10th June, with the practical examination between 9th and 13th 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 the top part of a door frame to include an outward opening, top hung, fanlight. Comments regarding the Joinery practical indicated that few, if any managed to hang the sash. The Carpentry paper required the construction of part of a small hip ended roof to include “bird beak” joints at the base of each rafter. The Carpentry paper required limited setting-out to obtain all information for the roof construction. Comments from colleges suggested that the time element was correct, and students did complete in the allocated time.

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>Dry rot in ground floor</u>	Some good answers given. A lot of students described causes rather than eradication.
Q2, <u>Setting-out segmental arch</u>	Many understood the principles of setting out the arc. However a few just guessed the compass position.
Q3, <u>Cubic calculation</u>	Many correct answers. A few with decimal point wrong.
Q4, <u>Staircase terms</u>	Poor sketches, reasonable answers.
Q5, <u>Contract documents</u>	Fairly good answers.
Q6, <u>Formwork components</u>	Some good answers. Sketches could have been better.
Q7, <u>Timber conversion</u>	Good answers although some sketches were poor and difficult to understand.

Q8,	<u>Wood machines layout</u>	Some good answers, lack of knowledge of flow of work.
Q9,	<u>Casement windows</u>	Very few answered correctly. Lack of knowledge regarding types of windows.
Q10,	<u>Timber jointing</u>	A splice joint was used to indicate a scarf joint in many cases. Some good sketches.
Q11,	<u>Timber floors</u>	Good answers overall.
Q12,	<u>Fitting mortice lock</u>	Good answers, but a few were very vague and disjointed on method of approach and sequence.
Q13,	<u>Roofing</u>	Fairly good sketches, cavity wall, fascia board or even wallplates were excluded on some sketches.
Q14,	<u>Portable power tools</u>	Good answers overall.
Q15,	<u>Drawer construction</u>	Satisfactory answers given by candidates.
Q16,	<u>Panelling</u>	Good answers given generally.
Q17,	<u>Scaffolding</u>	Overall satisfactory answers.
Q18,	<u>Timber mouldings</u>	Poor sketches, majority described correct mouldings.

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 some students had in fact attempted five. 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, Fitting a staircase (47 papers)
 Stair construction awareness and understanding technical terms was good. Fixing methods seem to have been learned quite well. Candidates showed a clear understanding of mortise and tenon draw boring techniques. However, less than half of the candidates showed an awareness of the necessity for techniques of level and plumb. As width of stair had not been specified, candidates did not mention possible use of a carriage piece.
- Q2, Segmental bay window
 Only 8 candidates attempted this question. Only 1 could state how to draw the segment without the known radius. Most lost marks were due to confusion over stormproof design.

Q3, Segmented window

29 candidates attempted this question and most were able to draw to scale and find the radius by geometry. The main problems candidates had was not being able to sketch or write relevant notes regarding levelling and striking or design a realistic centre to suit the span required.

Q4, Panelling

9 candidates answered this question reasonably well.

Q5, Roof trusses

32 very good answers and sketches.

Q6, Cutting list for door

55 candidates attempted this question. Most were happy with part (a) Many had difficulty with part (b) i) (Metric volume conversion), and others with percentages allowance addition for cutting of waste and VAT (b) ii).

Q7, Woodworking machinery

37 candidates gave good answers which produced reasonably high marks.

Q8, Formwork

9 candidates gave adequate answers.

Fellowship Examination

The Fellowship examination is offered to candidates who usually wish to upgrade from Membership 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 9th and 13th 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.

The Institute is always prepared to support examination centres with regards to schemes of work, suggested practical pieces etc, all of which can be obtained through Central Office.



INSTITUTE OF CARPENTERS

2003 - Prize Awards

<u>College</u>	<u>Candidate</u>	<u>No</u>	<u>Award</u>
Foundation Examination			
North West Kent College	John Poulson	03FM335	1 st (Endorsed Certificate)
Hackney Community College	Michael Halewood	03FM257	2 nd (Endorsed Certificate)
Hackney College	Marek Wasniewski	03FM270	3 rd (Endorsed Certificate)
Intermediate Examination			
Reading College	Jon Band	03IC242	1 st £50 plus Endorsed Certificate
Ealing Hammersmith & West London College	Lee Haden	03IC099	2 nd £35 plus Endorsed Certificate
Advanced Craft Examination			
Barnfield College	Gary Joyce	03ACC090	Highest o/a Theory & Practical marks in the Advanced Craft Examination. £50, Endorsed Certificate plus Medal. College awarded Advanced Craft Examination Shield.
Barnfield College	Mark Richard Pinney	03ACC031	2 nd highest o/a Theory & Practical marks in the Advanced Craft Examination. £35 plus Endorsed Certificate.
Ealing, Hammersmith & West London College	Peter Cooper	03ACC049	Highest Theory mark in the Advanced Craft Exam. Endorsed Certificate plus Medal. Alf Emary Cup Awarded to College.
Reading College	Nathan Hobbs	03ACC078	Highest Practical marks In the Advanced Craft Examination. Endorsed Certificate plus medal. Ken Hewett Shield Awarded to College.

Theory Paper Examiners

Mr D Riley MIOC	Examination Board Chairman
Mr C Tooke FIOC	Chief Examiner
Mr D Elliot FIOC	North Western
Mr G Malthouse FIOC	East Midlands
Mr P Burgess MIOC	East Midlands
Mr B Barker MIOC	Central
Mr J Marshall MIOC	Central
M P Sivell FIOC	Central
Mr K Clarke FIOC	Central
Mr T Eveleigh MIOC	Central
Mr P Walentowicz MIOC	Central

A special thanks to all who offered their services in preparing and marking the examination papers.

C R Tooke Chief Examiner

August 2003

The Institute Of Carpenters

Central Office

35 Hayworth Road

Sandiacre

Nottingham

NG10 5LL

Tel 0115 949 0641

Fax 0115 949 1664

Mr D Winson Secretary

Mrs H Thomas Examinations Liaison Officer

© Institute of Carpenters 2003

A Company Limited by Guarantee - Reg. No. 76125