



**GUIDANCE NOTES AND SYLLABUS
FOR THE MALTING DIPLOMA
EXAMINATION 2010**

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Revised August 2009

**Further copies of this document can be received by e-mail from
the MAGB office**

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GUIDANCE NOTES

General Information

Subject to there being sufficient candidates, the MAGB Malting Diploma Examination will be held on during the week beginning 21st June 2010 in the UK. For overseas entrants, arrangements may be made to hold the examination at an approved centre in or near the candidate's country of origin, but this cannot be assumed to be the case. The examiners reserve the right to decide which location will be used.

Examiners also reserve the right to cap the number of examination candidates to a maximum of 20 people.

This International Examination, which will be in English, will be open to both home and overseas candidates who have completed at least 3 years in the malting (or similar) industry at the time of registration in work closely related to technical matters. No formal qualifications will be required for entry to the exam. The Syllabus is wide ranging and designed to cover all aspects of malting.

Sponsorship

Each candidate must be sponsored by a person normally within his/her own company, who will be approved by the MAGB. The name of the sponsor must be declared at the time of registration. The sponsor will act as the candidate's adviser and assist him/her in his/her preparation for the examination.

Sponsors will be assisted in their task by receiving a printed "Guide to Sponsors", once the candidate has been accepted by the MAGB, or by prior application of the Sponsor to the MAGB.

Sponsors will be expected to ensure that candidates have the opportunity to receive instruction in all aspects of practical and theoretical malting and are properly advised on how to prepare for the examination.

Experience Prior to Entry

Candidates preparing themselves for this examination must acquire a basic theoretical and full practical knowledge of all aspects of malting. They will be expected to demonstrate extensive understanding and practical experience of the malting process and related operations; they will also be expected to possess a basic understanding of the commercial, scientific and engineering aspects of malting.

The sponsor will be required to certify that the candidate has completed at least 3 years in the malting industry. The candidate's relevant work experience and responsibilities must be listed and certified by his/her sponsor in the candidate's log at the time of registration (copy attached with Registration Form). It is expected that this experience should include a minimum time in the following departments:-

Barley purchasing	1 month
Barley intake	2 months
Barley handling and management	3 months
Malt processing	6 months
Malt handling and despatch	2 months
Quality control and laboratory	3 months
Engineering services	3 months

The minimum times stated are for your guidance but it is anticipated that such minimum useful experience will be necessary as a background for the examination. In addition, some experience should be gained at a brewery and distillery. If you are a Brewer or Distiller Maltster you must be familiar with the techniques, practices, quality requirements and analytical methods of the Sales Maltster and vice-versa.

It is the Examiners' experience that candidates who fail generally do so because of a lack of breadth of experience across the whole field of technical malting.

Gaps in experience should be filled by the time the updated candidate's log is submitted in April 2010.

Training for the Exam

Candidates are required to attend two separate one day training sessions, organised by MAGB, at a venue in the UK. Candidates will be given further information on these once their registration has been accepted. Fees for this training are part of the exam costs. In addition, Sponsors should assess and deliver training in areas where the candidates experience is limited. The candidate and the sponsor must ensure the candidate is aware of the major factors affecting the UK malting industry.

Candidates are recommended to consult the standard text books which deal with the malting and related processes and to keep in touch with the more practical papers, which appear in the various journals.

Whilst the examination is designed to test the candidate's practical knowledge of malting, it is emphasised that the candidate should demonstrate through the exam the capacity to construct a reasoned, logical and literate written report. This may demand particular effort and training for those candidates with limited experience of written examinations.

Candidates are advised to refresh their exam technique by providing written answers to questions for proof reading by their sponsors prior to the examination. Read the question, consult reference literature and roughly outline an answer. Then sit down and write and complete the answer within the permitted time span on the paper. It is often noticed that candidates are not fully prepared to write extensively over a three hour period in the exam, which is reflected in the quality of their presentation.

Past examination questions will be available on the MAGB website. It is strongly recommended that candidates use these as practise questions. Past papers will only be available to those taking the Diploma examinations.

Do take up invitations to learn about other malting plants and methods other than your own. If you cannot make your own arrangements for exchange visits, contact the MAGB office who will offer assistance.

The Examination

The standard of the examination will be high, and will be confined to practical and theoretical aspects of malting including a basic knowledge of the uses of malt.

The examination will consist of three written papers, each of 3 hours duration: Module 1 – Raw Materials; Module 2 – Processing; Module 3 – Health, Safety, Environment, Quality and Food Safety. For each paper there will be one compulsory question and a number of other questions chosen by the candidate from the options on the paper. The modules can be taken either over three years or all together. Candidates who fail any of the three modules can choose to retake them another year and can continue ad infinitum should they so wish.

The Diploma will not be awarded until all three modules have been passed and candidates will not be eligible to progress to the Master Maltster until they have achieved the Malting Diploma. Candidates must indicate on their registration forms how many modules they intend to take in 2010. There will be a charge of £200 per module for retakes of failed modules but no extra charge for taking the modules over three years.

The three written papers will account for a third each of the total marks. Candidates must achieve a pass mark in each module of the examination to be successful. The Pass mark that must be achieved for each module is 50%. All written work from overseas candidates will be sent to the UK for assessment.

Examination Technique

Examiners have found that many answers to previous papers have been poorly constructed and presented in muddled sentences. Answers should be roughly mapped out beforehand so as to cover all aspects of the question. Marks will be deducted for poor standards of writing and presentation.

Answers should be concise and not elongated with non-relevant information. Cover as much varied detail as possible and do not write endless paragraphs about one small facet of the topic.

Where a question is not directly associated with malting, try to relate your answer to show its significance to the industry.

Try to preface answers with a short introduction and make the final paragraph a concise summary.

Too much information presented in previous papers was superficial and inaccurate. Examiners are not looking for fine detail of a category that only a specialist would be expected to understand and padding out answers with such detail will not gain marks. Answers should reveal facts that are relevant to the practical solution or understanding of a problem and their significance to the industry should be explained.

The Award

The Maltsters' Association of Great Britain will award a certificate to successful candidates. This qualification will be 'The Malting Diploma' awarded by the MAGB, and holders are entitled to use the designation Dipl.Malt. In addition, those candidates achieving a sufficiently high mark in all sections of the examination will be awarded a Pass with Distinction. There may also be a single special award, 'The Walter Hyde Award for Distinction', given at the discretion of the examiners, where there is a candidate who has passed the examination with appropriate distinction.

Queries about Results

Drawing up the list of results is the responsibility of the Examination Board (EB) on behalf of The Maltsters Association of Great Britain (MAGB). The EB exercises judgement as to whether or not each candidate has reached the standard required to qualify for the award of a Malting Diploma and this decision is final in that there is no right of appeal to any other body outside MAGB. At each stage of the award process, careful checks are made to ensure that the EB makes decisions on the basis of full and accurate information.

If a candidate thinks that an error has been made in a result, he/she can query it with the Executive Director of the MAGB. Before doing this, the candidate should discuss the result with his/her sponsor. If the candidate still wishes to pursue the query, he/she should write

a brief letter to the MAGB Executive Director within three weeks of the date of notification of the result in question.

It is not possible to arrange for scripts to be re-marked, for information about examination performance to be provided (other than that information contained in the letter notifying the candidate of the result), or for previously undisclosed special circumstances to be considered. All queries will be thoroughly investigated, and if any error comes to light, the matter will be referred to the EB. A reply will be sent to the candidate as soon as possible.

Formal Appeals

Should a candidate fail, and after making a query (as above) still be dissatisfied with the MAGB decision, appeal may be made to the Chairman of the Technical Committee through the MAGB Executive Director. Any such detailed applications must be made within three weeks of the date of reply to the original query.

Appeal can only be made against a 'fail' result (project or overall). The powers of the Chairman of the Technical Committee extend only to establishing that results have been determined in the proper manner, not to changing the decision of the EB, since the EB has been empowered to take such decisions by the MAGB.

Timetable

The final date for registration for the examination is Monday 30th November 2009. At the end of this document is a Registration Form for this purpose which requires a countersignature from your sponsor. The sponsor must also certify in the candidate's log that you have had over three years work experience in the industry, at the time of registration, of a quality sufficient to enable you to undertake the examination.

An updated candidate's log must be submitted to the MAGB by your sponsor no later than Friday 23rd April 2010. Note that you may be excluded from the written examination if this is not received.

Latest date for returning Registration Form and the Candidate's Log.	Monday 30 th November 2009
Return by Sponsor of updated Candidate's Log	Friday 23 rd April
1 st Day Training – venue t.b.a.	Date t.b.a.
2 nd Day Training – venue t.b.a.	Date t.b.a.
Written examinations take place	During the week beginning Monday 21 st June

Fees

The registration fee for the examination for employees of MAGB members will be £200 plus VAT per candidate, with a fee of £800 plus VAT to attend 2 days training and take the 3 exam modules. For all other candidates, the registration fee will be £400 plus VAT and the training and exam fee £1600 plus VAT. Your company will be invoiced once your registration has been accepted.

SYLLABUS

The following syllabus is intended to illustrate the scope of the examination, but emphasis has been placed on those elements of the syllabus which constitute 'core' knowledge by ***italicising*** such subjects. Candidates should possess a full understanding of these 'core' subjects with specific reference to the UK malting industry. Outside the core subjects, candidates should be familiar with many of the more specialised subject areas listed. In the examinations, compulsory questions will be restricted to the 'core' knowledge, but where there is a choice of questions, the whole syllabus will be tested.

Raw Materials

A knowledge of ***malting barley varieties***, the basic factors governing the breeding and growing of malting barley, and a basic knowledge of other cereals. ***Barley purchasing and acceptance/rejection of deliveries, intake, drying, screening and storage; infestation precautions and treatments; principles of barley analyses and their interpretation; dormancy; micro-malting tests.***

The Malting Process

Steeping, including water quality and temperatures, aeration, rest periods, steep-out moistures, additives and processing aids, germination techniques including control of moisture and of air temperature, volume and humidity, kilning procedures and variations for different malt qualities, fuels used for kilning, control of malt analysis and malting loss by variation in processing techniques, coloured and special malts, types of malting plant, machinery and conveyors, air conditioning systems.

Malt

De-culming, screening, weighing and sampling, grading, storage and stock control; despatch in bags and bulk; recommended methods of malt analyses, specification, interpretation of malt analysis; quality assurance and quality control; use of statistical techniques, co-products handling.

Services

Malting services such as ***water, electricity, fuel and effluent; energy conservation; maintenance, instrumentation automation and control systems; basic understanding of capital and operational costs; project appraisal;*** distribution

Hazards and Safety in Malting

Understanding of health and safety issues especially confined spaces, dust and explosion risk. Safe working procedures, COSHH,

Environment

Appreciation of the main environmental impacts of malting processes, opportunities to control these impacts and consequences of failure. Awareness of environmental legislation. Knowledge of how to construct a risk matrix for environment and how to organise mitigation measures. Knowledge of the major environmental impacts of different parts of the process.

Quality

Broad knowledge of quality assurance schemes, how to report, monitor and control quality, the impact on business operations and on malt performance in the brewery or distillery. Understanding of analytical parameters, typical values, action measures when outside pre-defined limits.

Food Safety

HACCP, cleaning and plant hygiene. Awareness of certification standards.

Uses

General understanding of the brewing and distilling processes, including *reasons for specifications of certain malt properties* and diastatic and non-diastatic malt extracts; the influence of malt quality on brewhouse performance, with particular emphasis on mashing, separation techniques, and wort quality, uses of malt and malt products within the food industry.

General

A knowledge and background of the international malting industry and its markets; industry economics; producers and users; *barley supply and demand* and political factors (CAP, WTO) affecting world trade in barley and malt.

Module 1 – Raw Materials

Module 2 – Processing

Module 3 – Health, Safety, Environment, Quality and Food Safety

Notes

Candidates may answer each question in the order of their choice, but it is suggested that the multiple choice and shorter questions are answered first so that if spare time is available, more effort can be directed to the essay questions which account for almost half the marks.

Basic Pocket calculators should be brought for use in some of the questions. Hand held computers/databases will not be permitted.

Answers to all written papers should be in black ink.

MAGB MALTING DIPLOMA EXAMINATION - 2010
REGISTRATION FORM

FULL NAME OF CANDIDATE		
POSITION HELD		
NAME AND ADDRESS OF COMPANY		
CANDIDATE'S SIGNATURE		
DATE		
NAME AND ADDRESS OF SPONSOR		
PLEASE TICK TO INDICATE WHICH MODULES THE CANDIDATE WILL TAKE IN 2010	Module 1 – Raw Materials	
	Module 2 – Processing	
	Module 3 – Health, Safety, Environment, Quality and Food Safety	

DECLARATION BY SPONSOR:	
"I certify that the above named candidate has already completed at least 3 years in the malting industry at the time of registration, in work closely related to practical malting matters, and return the Candidate's Log with the registration form. The updated version of the Candidate's Log will be submitted no later than Friday 23 RD April 2010"	
SPONSOR'S SIGNATURE	
DATE	

FEES	MAGB MEMBERS	OTHERS
REGISTRATION FEE (plus VAT)	£200	£400
THREE MODULES AND 1 X 2 DAYS TRAINING (plus VAT)	£800	£1600
TOTAL FEE	£1000	£2000

VAT REGISTRATION NO 243 6241 80

Return to the Administrator, MAGB, 31b Castle Gate, Newark, Notts NG24 1AZ.
Do not send payment with this application. If your application is accepted by the Examiners then your Company will be invoiced in due course by the MAGB for the registration, training and exam fees.

FINAL DATE FOR REGISTRATION: MONDAY, 30TH NOVEMBER 2009

MAGB MALTING DIPLOMA EXAMINATION 2010
LOG OF CANDIDATE'S EXPERIENCE AND TRAINING

Department: **Barley Purchasing**
 Experience Recommended: **1 month**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Barley Intake**
 Experience Recommended: **2 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Barley Handling and Management**
 Experience Recommended: **3 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Malt Processing**
Experience Recommended: **6 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Malt Handling and Despatch**
Experience Recommended: **2 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Quality Control and Laboratory**
Experience Recommended: **3 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Department: **Engineering Services**
Experience Recommended: **3 months**

Candidate's Comments	Sponsor's Comments
Time spent:	

Experience gained at a Brewery

Candidate's Comments	Sponsor's Comments
Time spent:	

Experience gained at a Distillery

Candidate's Comments	Sponsor's Comments
Time spent:	

Candidate's Signature:

Sponsor's Signature: **Date:**