Guidance notes for Faculties and Departments for the production of examination question papers 2017/18

These notes relate to examination papers for the early and main examination period in Easter Term 2018.

Examinations that occur at other times have different deadlines - please email RecordsandExams@admin.cam.ac.uk in the first instance to check earlier deadlines.

The Board of Examinations is responsible for the administration of university examinations, including the management of question papers. This document will identify:

- Deadlines for submission of question papers for printing
- Security issues related to the production of question papers
- Format of question papers

Checklist:

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**Deadlines for submission of question papers for printing**

In most cases, departments submit a camera-ready copy of each question paper to the Reprographics Centre so that it can print multiple copies and prepare the examination packs. The deadline for submission of your camera-ready copy to the Reprographics Centre is **Friday 20 April 2018** for the main period (21 May-15 June) and **Tuesday 27 March 2018** for the early period (23 April-11 May).

A small number of departments request to see a proof of the printed examination paper before multiple copies are made. This is normally in the case of examination papers with a high number of symbols or accents or which contain detailed illustrations. If you intend to request a proof, the deadline for submission of your camera-ready copy to the Reprographics Centre is **Friday 6 April 2017 for the main period and Friday 9 March for the early period**. This earlier deadline is in order to allow time for any amendments to be made and checked. You will need to make an appointment with the Reprographics Centre to view the proof copy – this should be arranged directly with them.

Very occasionally, a department prints its own multiple copies and then submits them all to the Reprographics Centre so that it may prepare the examination packs. The deadline for submission of your multiple copies to the Reprographics Centre is two weeks before the first of the examination papers.

In a few cases, departments print their own multiple copies of each question paper and store them securely in their own department. This applies to a small number of examinations, which are held in departmental sites. In these cases, the department is responsible for all aspects of the quality and timing of the printing of the question papers, for their secure storage and for the correct preparation of the examination packs. In these cases, you must still submit a copy of the question paper to the Reprographics Centre so that they can prepare any packs for students sitting in other locations. The deadline for submitting this to the Reprographics Centre is two weeks before the first of the examination papers.

| Camera ready copy – proof required (early period) | Friday 9 March 2018 |
| Camera ready copy – no proof required (early period) | Tuesday 27 March 2018 |
| Camera ready copy – proof required (main period) | Friday 6 April 2018 |
| Camera ready copy – no proof required (main period) | Friday 20 April 2018 |
| Department printing own copies and delivery to Reprographics | Two weeks before first examination |
| Department printing own copies for examination in dept. Copy required to be sent to Reprographics | Two weeks before first examination |
Security

The initial preparation, editing and copying of question papers needs to be undertaken under strict confidentiality. All versions of draft and final copy must be typed, copied and stored securely.

Ideally, the computer(s) used to prepare and store the questions should not be connected to the University or any other network because of the danger of unauthorised access but this is not always practicable. Where a computer used for preparing exam questions is connected to a network, it is essential that the risks are fully understood and steps taken to ensure that the overall level of risk is acceptable. The following paragraphs describe factors, which should be considered when assessing the risks and some measures, which can be taken to mitigate these. If you do not fully understand the issues discussed below, it is essential that you consult someone who does e.g. a departmental Computer Officer or the University Information Services, before using a networked computer to prepare exam papers.

Understanding the Risk

Before considering particular factors, which may lead to security being compromised, it is important to realise that as well as the risk of unauthorised access there is also the risk that such access will go completely undetected. This both highlights the need to reduce the risk of any unauthorised access occurring and to have mechanisms in place to control network traffic and record any suspicious activity.

It is also important to consider the impact of unauthorised access. This is clearly higher for a whole paper than for a single question so, whilst it may be acceptable for initial drafts of individual questions to be prepared on well secured networked computers, serious consideration should be given to having a dedicated non-networked computer for preparing the complete paper(s). This need not necessitate the purchase of an extra computer, instead an existing computer can be used with the operating system booted from a USB memory stick rather than the local disk drive e.g. Windows-To-Go or various versions of Linux. If this setup is used, access should not be enabled to either the local disk drive or the network.

A desktop computer is normally used either for entirely local work or as a client for services provided by other computers e.g. web servers. Used in this way, there should be little risk of unauthorised access to material stored on the local disk drive but care must be taken not to use external storage, and especially not on servers outside the University's control. This applies both to the explicit storage of exam paper files but also to implicit copies taken as part of backups of the locally stored data. The risk of unauthorised access to files stored on the local disk drive may be further mitigated if the time that they remain on the disk is kept to minimum by transferring them to some other medium e.g. USB memory stick or CD or DVD, which can be stored in a physically secure way. However, note that simply deleting a file from the local disk does not necessarily delete the contents so care must still be taken to limit who has access to the disk. Note that these problems can be avoided if the operating system is run from a USB memory stick as suggested above.

The risk is much greater, and potentially unacceptably high, if the computer itself provides any services. The firewall software on the computer should be configured to deny access to all such...
services and these services should also be turned off wherever possible. One of the most likely to be enabled is file-sharing of files on the local disk – this must be turned off. Other common services include web servers and mechanisms to allow remote access to or maintenance of the computer – these too must be turned off. As well as these standard services, there is a risk of unintended services being introduced by malware e.g. viruses and spyware. Particular care must therefore be taken to ensure that the computer is free of such software by running fully up-to-date anti-virus software.

**Use of Email**

Exam questions must not be entrusted to unencrypted email, which should be viewed in security terms as not dissimilar to sending it through the post printed on a postcard. Encryption can be used to reduce the risk to an acceptable level but it is important that the limitations of the method being used are clearly understood so that the residual risk can be properly assessed. This assessment should be made with the assumption that the message could fall into the wrong hands and that an attempt may be made to decrypt the contents especially if it is possible to guess from the unencrypted part of the message that this may be worth the effort e.g. the subject is *Computer Science Tripos Exam Paper*. It is clearly important to be able to be sure that the risk of the key(s) leaking or being guessed is negligible.

**Printing and Paper Copies**

Great care should be taken when printing out exam papers and a locally attached, i.e. non-networked printer should normally be used. There are a number of risks with networked printers associated with transferring data over the network and the data then being stored in the printer. Many printers hold a copy of the print job until it has completed printing and, if a problem arises during printing e.g. a paper jam, it is very hard to delete the job and thus avoid the exam paper being printed later when the problem is cleared but the person trying to print it may no longer be around.

Any print outs or notes associated with the content of question papers should be locked away securely and shredded once they are no longer required. Any copies of the final paper, electronic or on paper, kept in the department or a faculty office must be stored securely e.g. in a locked filing cabinet in a secure room with restricted access.

**Further information**

The Board of Examinations has triggered a review of question paper setting and it is hoped that further assistance will be available for 2018-19.
**Format of examination question papers**

All University examination papers are produced in A4 size, and to a standard style. Faculties and Departments are requested to conform as closely as possible to the following guidance. A specimen question paper is attached for reference at Appendix A (p 9).

The front page should contain the following:

<table>
<thead>
<tr>
<th><strong>The subject code</strong></th>
<th>e.g. AAT1 or NST2CH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The long description</strong></td>
<td>e.g. Archaeology and Anthropology Part 1 Natural Sciences Part II Chemistry</td>
</tr>
<tr>
<td><strong>The paper code</strong></td>
<td>e.g. Paper A 16</td>
</tr>
<tr>
<td><strong>The paper title</strong></td>
<td>e.g. Medieval Poets</td>
</tr>
<tr>
<td><strong>Date and time of examination</strong></td>
<td>please refer to the examination timetable for this information</td>
</tr>
<tr>
<td><strong>Rubric</strong></td>
<td>as necessary</td>
</tr>
<tr>
<td><strong>Stationery</strong></td>
<td>e.g. 8 page answer book x3; rough pad; graph paper</td>
</tr>
<tr>
<td><strong>Special requirements</strong></td>
<td>e.g. calculator, graph paper, data books</td>
</tr>
<tr>
<td><strong>Instruction:</strong></td>
<td>you may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so</td>
</tr>
</tbody>
</table>

It is recommended that the question paper uses a *sans serif* font for the purpose of improving accessibility.

All papers containing more than 3 pages should carry the instruction (TURN OVER). This should be set in capitals on a new line after the last question on the third page and then on subsequent right hand pages only. The front page containing the title and rubrics only (page 1) and the last page of the paper should **not** carry a turn over instruction.

After the last question, the instruction END OF PAPER should appear in capitals centered on a new line. If a page deliberately does not have anything on it, please insert the information THIS PAGE IS BLANK.

Signs and symbols, hand-written equations or simple diagrams must be of fine black ink lines. Ball-point pens are not suitable for reproduction.

The total area covered by text must not exceed 6” x 9” / 150 mm x 230 mm. This includes diagrams, illustrations and extracts. Otherwise, text could be lost during production of the bound volumes of examination papers. A template showing the position of the margins is available from RecordsandExams@admin.cam.ac.uk

Please ensure that all camera-ready copies when submitted are marked lightly in pencil on the reverse showing:

- the Tripos title;
- the paper number and title; and
- the page number of each sheet.

This will readily identify the correct paper and sequence of pagination within sets of papers.
Stationery and special material requirements

The front page of the question paper is the definitive source of information about what stationery and other material is required in the examination and this is used to set up for each examination. Supplying this information is not optional as it is used to prepare the examination room for students and to prepare the papers for candidates sitting in other locations. The Reprographics Centre, in preparing these examination packs, adheres strictly to whatever you have written on the question paper. Whatever is identified on the question paper will be supplied in the examination site. **Anything not included on the question paper will not be provided on the day.**

The Student Registry will contact you about your stationery requirements in the Lent term. You must ensure that the detail on the question paper supplied to the Reprographics Centre matches what is supplied to the Registry at this point and any special material requirements are clearly identified.

If you have any queries please contact Ms Jo Overhill (RecordsandExams@admin.cam.ac.uk).

Proof reading and the formal approval of question papers

All question papers must comply with the Form and Conduct Notice issued by the Faculty. Any variation from this, for example in the content, scope and / or rubric of the question paper must have been formally authorised by Education and Student Policy.

Question papers should be thoroughly proof read and formally approved prior to submission. Each year some errors in question papers are identified during the examination and these are reported to the Board of Examinations. The Board of Examiners may wish to delegate some aspects of the detailed scrutiny of question papers but at least two designated examiners should be responsible for undertaking detailed proof-reading of the whole paper prior to finalising a copy. The Chairman is responsible for determining an appropriate timetable for the submission of draft question papers so that examiners may consider and approve proposed question papers in time to comply with the deadline for submission to the Reprographics Centre.

Submission of examination question papers to the Reprographics Centre

*If you are submitting camera ready copy so that the Reprographics Centre can print multiple copies and prepare the examination packs*

The Chairman of Examiners (Senior Examiner for NST / MVST subjects) is responsible for taking the final camera ready copy of the examination paper(s), by hand, to the Reprographics Centre together with the signed declaration confirming the accuracy of the paper. A receipt will be issued.

The final camera ready copy can be emailed to the Reprographics Centre, but this will be at your own risk and as stated above, delivery by hand is the preferred delivery method. Email the copy to Reprographics.Enquiries@admin.cam.ac.uk, ensuring it is password protected. Please send the password in a separate email. Reprographics will hold the email on an external hard drive.
The deadline for submission of your camera ready copy to the Reprographics Centre is 20 April 2018 (6 April 2018 if you require a proof).

If you are printing your own multiple copies and storing them securely in your department

The Chairman of Examiners (Senior Examiner for NST / MVST subjects) is responsible for taking ten copies of each question paper to the Reprographics Centre together with the signed declaration confirming the accuracy of the paper. A receipt will be issued. These copies are required for any students who are examined in alternative sites e.g. Titan, University Centre or College; it is the Reprographics Centre which prepares these individual student's examination pack(s). These copies are also required for the bound volumes.

The deadline for submission of your ten copies to the Reprographics Centre is two weeks before the first of the examination papers. This is to allow the Reprographics Centre time to prepare the individual student packs for students sitting examinations in alternative sites.

If you are printing your own multiple copies and submitting them all to the Reprographics Centre.

The Chairman of Examiners (Senior Examiner for NST / MVST subjects) is responsible for taking all the examination question papers to the Reprographics Centre together with the signed declaration confirming the accuracy of the paper. A receipt will be issued. They must be packaged in robust, sealed envelopes and should be labeled as follows:

(i) a copy of the first page of the question paper should be displayed on the outside of each envelope; this identifies the examination detail, the date and time of the examination and any stationery requirements; please refer to pg 4 for the information required on the front page;

(ii) write on each envelope the number of copies enclosed;

(iii) write on each envelope the location of the examination e.g. Guildhall, Corn Exchange.

The deadline for submission of your multiple copies to the Reprographics Centre is two weeks before the first of the examination papers. This is to allow the Reprographics Centre time to prepare the individual student packs for students sitting examinations in alternative sites.

Publication of examination question papers

Following the examination period, the Reprographics Centre will prepare the bound volumes of examination papers.

If you have exemption from publishing your papers in the bound volumes then please mention this to the Reprographics Centre when you hand in the copies of your question papers or email Nigel
Any queries arising from these guidance notes should be directed in the first instance to:

Ms Jo Overhill  
4 Mill Lane  
Tel: 01223 (3) 38389  
E-mail: RecordsandExams@admin.cam.ac.uk

Reprographics Centre  
The Old Schools Courtyard  
Monday to Friday, 8.30 a.m. to 1.00 p.m. and 2.00 p.m. to 4.45 p.m.
Appendix A

AAT1
Archaeology and Anthropology Part I

Sunday 31 February 2003 9 to 12.00 pm

Paper A16

Introduction to Anthropology

You should answer five questions in total. Answer three questions from Section A and two more from Sections B and / or C.

Answers from each Section must be written in a separate booklet.

Booklets from each Section must be tied up in separate bundles, with the letter of the Section written on each cover-sheet.

Write your number not your name on the cover sheet of each Section booklet.

STATIONERY REQUIREMENTS
8 page answer booklet x 3
Rough Work Pad
Graph Paper x 2 sheets

SPECIAL REQUIREMENTS TO BE SUPPLIED FOR THIS EXAMINATION
Calculator – students are permitted to bring an approved calculator
Data Book (specify reference number or title or colour etc as necessary)
Dictionary (specify reference number or title or colour etc as necessary)

You may not start to read the questions printed on the subsequent pages of this question paper until instructed to do so.

1This is the Subject Code
2This is the Paper code