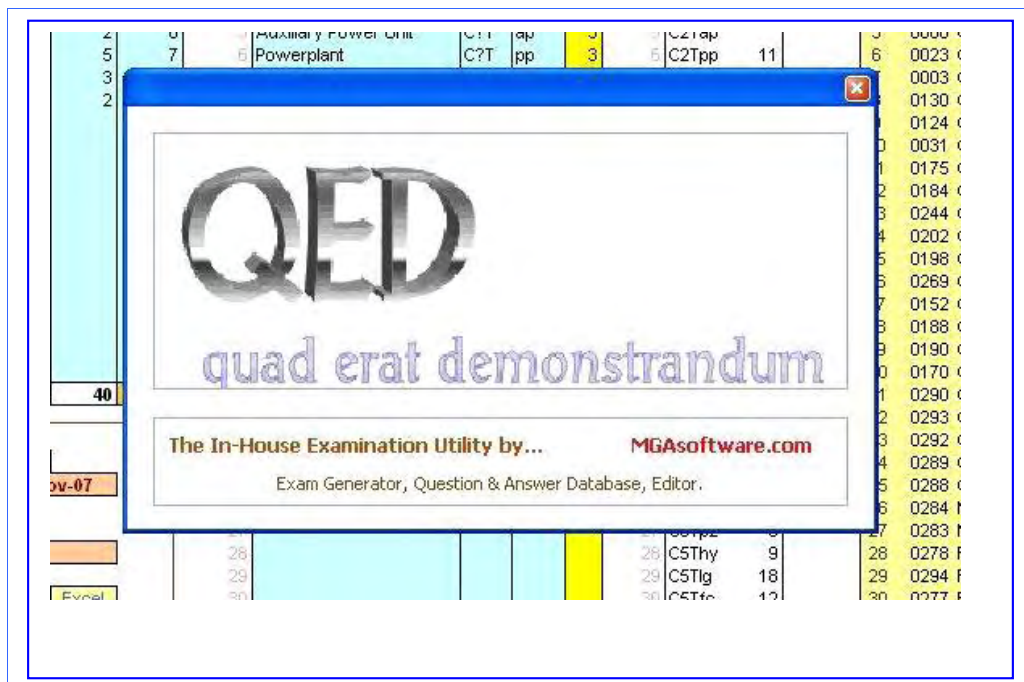


QED Multi-Choice exam creator/editor utility. & QEDconvert conversion utility



MGA software.com

UK tel: 07791 466201

Manual correct to QED version 3.1

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Latest Changes

Version 3.0:

- 1 'Create New Exam' is renamed 'Set New Exam'
- 2 A new SetUp parameter 'Multi Choices' may be set to 3 to change the number of multiple choice answers from the default 4. This is to cater for European conventions requiring 3 multi choice answers.

Version 3.1:

- 1 Create Exam Paper option deleted from SetUp Housekeeping. (Question and Answer papers for an exam are automatically created when an exam is selected or created).
- 2 Refresh Object Library deleted from SetUp management drop-down.
- 3 Import Questions (new feature) added to Question Bank housekeeping drop-down.
- 4 Reconstitute Codes (new feature) added to SetUp Management drop down.

Version 3.2:

- 1 Questions per exam increased to 200.
- 2 **Index Questions and answers utility**

QED Program stats	Question bank	9999
	Subjects	20
	subSections	40
	Questions per exam	200
	Exams stored	20
Code formats	Subject	3 characters
	Sub-Section (Optional)	2-4 characters
	Associated Spec	3 characters
		('?'= wild card)

Multi-Choice exam papers

QED creates multiple-choice hard-copy examination papers each with up to 100 questions. At the same time, corresponding answer sheets are produced for both student and examiner. Questions are randomly selected and each has its internal answer options – a,b,c,d - randomly shuffled (or a-b-c when QED is in 3 multi-choice options mode).

On board editing and storing

QED provides an on-board database with the facility to edit and save up to 9999 questions. Each question may be assigned to one of 20 subject categories and each subject area can be further broken down into 40 sub-sections.

To set an examination paper all the operator has to do is nominate the number of required questions in each subject category. Within a particular subject, the number of questions in each sub-section is controlled by specifying its 'max' value (on the SetUp screen). This feature prevents the randomization process from inadvertently 'bunching' questions in any one sub-section, and evens the spread of questions over the subject material.

Regular testing made easier

QED was developed for the aviation sector, to enable charter companies to provide routine in-house checks for their flight crew. Outside of aviation, it is especially suited to any specialized profession which needs to periodically test its personnel and update its knowledge base (because for example, of changing legislation) and has proved highly successful and cost-effective in these situations.

Works in Microsoft Excel

QED comes as an Active Microsoft Excel Spreadsheet module (qed.xls) and its documents are produced by either Excel or Word. The qed module edits and stores the database and the examination pro-formas you have created. The software provides for your company identifying logo or graphic to be displayed at the top of the printed documents and other layouts can be customized to your specifics by MGA.

QED enables the creation of examination papers by randomly selecting questions from its on board database. Each question is assigned 4 answers labelled 'a,b,c,d' (in the default 4 multiChoices mode). An exam can comprise of up to 100 questions spread over up to 20 subject areas. A **subject** is optionally divided into **sub-sections**, each being associated with a parent subject. The examiner uses **QED** to create a unique examination with a specific number of questions in the subject areas to be tested.

The on board database (called the '**Question Bank**') is created or edited via an Edit dialog. This dialog has selection fields for Subject and Sub-Section, and input fields for the Question text, and Four Answer options (one correct and three incorrect). A unique reference code and last revised date is applied to each edited question by the logic. Data can also be edited by entering it directly onto the QuestionBank database. Alternatively, **QEDconvert**, a Word document conversion utility will transfer pre-existing question and answer material from Word into QED format.

A coding structure for sorting Questions forms the basis upon which the QED logic makes selections in the exam creation process. The user assigns each Question a code which comprises of a 3 character subject code optionally followed by a 2-4 character sub-section suffix. The program then uses these codes to create the required mix of random questions up to specified maximums. A typical composite code applied to a question might, for example, be: 'C2Tel' and defined by the user as:

'Citation II Technical (C2T), electrical sub-section (el)'.

Each sub-section code has a selectable 'max' value which limits the number of questions relating to that sub-section in any one subject area. For example, an examiner might specify an upper limit of 3 questions with the 'el' suffix. This feature helps in producing an even distribution of questions over the spread of subject material. The composite Question code applied to a question is automatically derived from user drop-down selections when writing data using the Edit dialog.

For **QED** to operate, it first requires a critical mass of Questions to be in its 'Question Bank.' For the randomisation processes to be effective it is recommended to have at least twice the number of questions available to what is required for an exam.

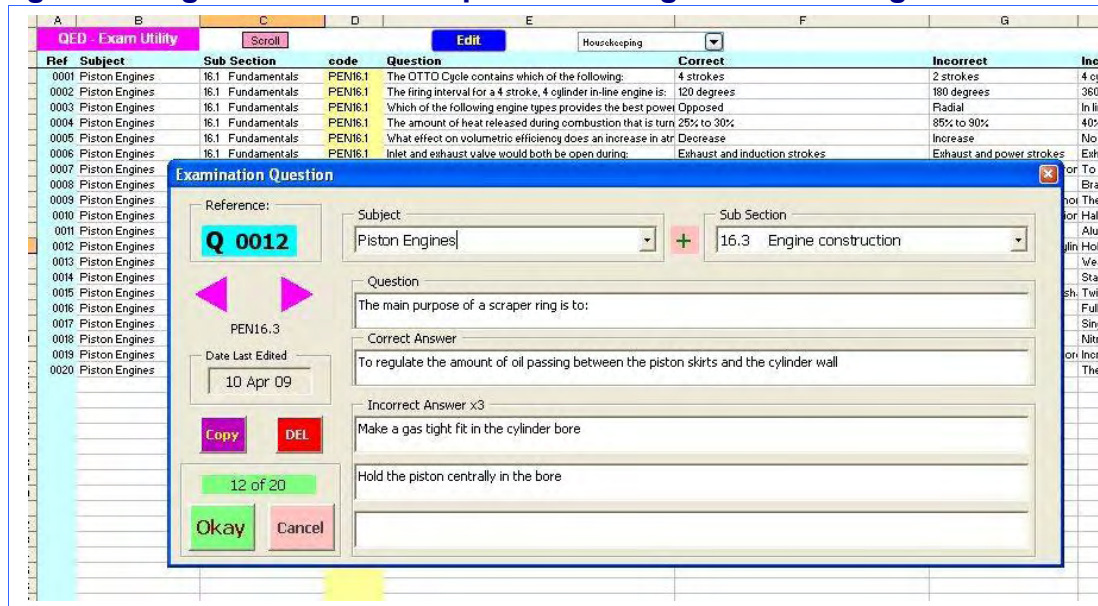
Each exam can be saved and used again, and is identifiable by a reference and date. The reference is specified at exam creation time, along with the number of questions in each subject area.

QED QuestionBank screen

Click Edit with the cursor positioned in the row to be edited (or outside the range to force a new entry) to call up the 'Examination Question' editing dialog. Note that each question has one correct answer plus three incorrect.

During edit, each question can be assigned to a subject and (optionally) a sub-section. The subject/sub-section code is automatically supplied. Clicking Okay updates the question totals displayed on the SetUp screen. (Check that the number of the last question on the QuestionBank screen is the same as the total reported on SetUp screen).

Creating or editing an examination question using the Edit dialog



Click Copy to make a copy of the current question when you want to create a new question based upon the current one.

Click the Del button to delete the current question from the database.

Manually writing Question data:

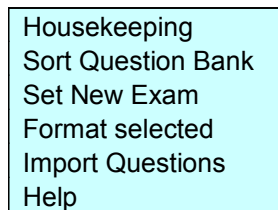
To release protection click Edit and then Cancel out of the dialog. This will enable Question and Answer data to be written directly into the columns of the QuestionBank screen. When done, click Housekeeping 'Format Selected' to format and number the new data. When manually writing questions, be aware that the composite Subject/sub-Section code must NOT contain the wild card ('?') character. A recommended method is to leave the code blank and use the Edit dialog in a separate process later to establish codes.

Note that when using the dialog to enter question data, a valid subject must be selected in order to proceed. In order to use the edit dialog where no coding system has yet been devised, it is recommended to write one 'parking' code which can later be reset as required.

This does not apply when data is being directly written to the data sheet.

The Write Subject / Sub Section Code dialog can be called from the **QuestionBank** screen by clicking on the plus sign between subject and sub-section drop-downs.

The Housekeeping drop-down:



Sort Question Bank

Sort Question Bank list by Reference Number or Code. (Note the logic will sort the list to the default reference number order before reconstituting codes)

Set New Exam

Call up the Create New Exam dialog (see [Creating an Exam](#))

Format Selected

Selected rows will be formatted and sequentially numbered. Use this option after Question Data has been manually written (ie. without using the edit dialog).

Import Questions

This function provides the user with the ability to import a bank of questions developed in another QED module. At the prompt enter the file name to import Question data from. The imported data will be appended to current list. After importing, the option will be presented to 'reconstitute Codes.' Click OK to repopulate Subject and sub-Section codes.

QED Question Bank Codes

QED codes

QED uses a system of alpha-numeric codes to define Subjects and subSections. Click 'Question Bank Codes' on the SetUp screen to call up the dialog.

Exam 'Subjects' are identified by 3 character alpha-numeric Codes. Each Subject (up to 20 may be user defined) can be optionally broken down into sub-sections (up to 40 may be user defined). Where a sub-section exists, it is associated with specified subject topic(s). The total question tally for the Subject is limited to the number specified within which, the sub-section total also has a specified upper limit.

Sub-sections identify a sub-set of an examination topic (eg: Subject= 'propellers', Sub-section= 'variable pitch propellers'). Each sub-section is associated with specified Subject(s) by an 'Association Spec' ('?' may be used as a wild card eg: C?T= the second character can be anything). Note Association Spec and Subject Code must comprise of 3 characters. The Code applied to each Question is the 3 chr Subject code and optional 2-4 chr Sub-section code appended as a suffix.

The Write Subject / Sub Section Code dialog

The dialog box is titled "Write Subject / Sub-Section Code". It features a "Select" dropdown menu, a "Code" input field, and a "Description" input field. Below these fields is a text area containing the following text:

Exam 'Subjects' are identified by 3 character alpha-numeric Codes. Each Subject (up to 20 may be user defined) can be optionally broken down into sub-sections (up to 40 may be user defined). Where a sub-section exists, it is associated with specified subject topic(s). The total question tally for the Subject is limited to the number specified within which, the sub-section total also has a specified upper limit.

Sub-sections identify a sub-set of an examination topic (eg: Subject= 'propellers', Sub-section= 'variable pitch propellers'). Each sub-section is associated with specified Subject(s) by an 'Association Spec' ('?' may be used as a wild card eg: C?T= the second character can be anything). The assembled Code applied to each Question is the 3 chr Subject code and optional 2 chr Sub-section code appended as a suffix.

On the right side of the dialog, there are "Okay" and "Cancel" buttons.

Click on the 'Question Bank Codes' button on the **Setup** screen to call up the dialog. (from the **QuestionBank** screen click the plus sign between subject and sub-section drop-downs).

Use this dialog to create or edit Subject or Sub Section codes.

Select either 'Subject code (main topic= 3 chr)' or 'Sub Section (optional 2-4 chr suffix)'

Note if 'Sub Section' is selected, an extra box labeled 'Associated Subject(s):' is presented.

The dialog box is titled "Write Subject / Sub-Section Code". It features a "Select" dropdown menu, a "Code" input field, a "Description" input field, and an "Associated Subject(s):" input field. Below these fields is a text area containing the same text as the previous screenshot. On the right side, there are "Okay", "Cancel", and "Change" buttons.

The "Select" dropdown is set to "Sub-Section Code (optional suffix 2-4 chrs)". The "Code" field contains "pn" and the "Description" field contains "Pneumatics". The "Associated Subject(s):" field contains "C?T".

The "Change" button is highlighted in purple.

Change Code As well as editing descriptions, you can use this form to change existing codes: When the selected code is already on file the logic presents a purple 'Change' button (see above). Click the Change button and enter a new code in the 'Change Code to' box. All references to the old code within the Question Bank database will be changed to the new.

QED SetUp screen

The screenshot displays the QED SetUp interface. On the left, there are input fields for 'User Name' (MGAsoftware.com), 'Help Filename' (MGA-QED.doc), and 'Logo Image File' (mga2007.gif). Below these are options for 'Print to Word / Excel' (set to Excel), 'Paper Size' (A4), and 'Pre-2003 Fix' (0). A 'Management' dropdown menu is also visible. In the bottom left, an 'Exam Stats' table shows current exam details and a list of exams.

Current Exam			
-No	ExamRef	-Date	-Qs
0	Test3	11-Mar-09	36
ExamList			
1	okay	20-Sep-07	
2	test3	13-Dec-07	
3	test4	14-Dec-07	
4	QED001	09-Mar-09	
5			
6			

The main area features a 'Question Bank Stats' table and a 'Question Bank Codes' table. The stats table shows a total of 40 questions required and 305 available. The codes table lists various subjects like Electrical, Lighting, and Master warning system with their associated codes and maximum counts.

8	subjectData	Code	Req.	Avail.
1	Technical - Citation II	C2T	10	137
2	Technical - Citation V	C5T	11	143
3	Performance - Citation II	C2P	3	7
4	Performance - Citation V	C5P	4	
5	MEL	MEL	2	6
6	FTL	FTL	5	7
7	Memory items	Mem	3	3
8	Documentation	Doc	2	2
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
Totals			40	305

20	subSectionData	Assoc Spec	code suffix	Max
1	Electrical	C?T	el	3
2	Lighting	C?T	li	3
3	Master warning system	C?T	mw	3
4	Fuel systems	C?T	fs	3
5	Auxiliary Power Unit	C?T	ap	3
6	Powerplant	C?T	pp	3
7	Fire protection	C?T	fp	3
8	Pneumatics	C?T	pn	3
9	Ice and rain protection	C?T	ir	3
10	Air conditioning	C?T	ac	3
11	Pressurization	C?T	pz	3
12	Hydraulic power systems	C?T	hy	3
13	Landing gear and brakes	C?T	lg	3
14	Flight controls	C?T	fc	3
15	Avionics	C?T	av	3
16	Miscellaneous systems	C?T	mi	3
17	Perf - take-off	C?P	to	3
18	Perf - landing	C?P	la	3
19	Perf - cruise	C?P	cz	3
20	Perf - 2nd segment	C?P	ss	3
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				

The SetUp screen maintains and displays program management information.

Program Parameters

User Name: The licensed user name.
Help Filename: Specifies the word.doc help file normally MGA-QED.doc.
Logo Image File: Specifies the image for inserting in printed headers.
Print to Word/Excel: Select either Word or Excel from the drop-down.
 In Excel mode (recommended), exam docs are printed within Excel.
Paper Size Enter (eg) Letter, A4, etc...
Pre-2003 Fix: * The Microsoft Word interface is platform-dependent. If you are using Excel 2002 or lower and want to employ Word, turn on Pre-2003 Fix by selecting '1'. The fix comes into effect when qed is next launched.
MultiChoices Set to 3 (a – b – c) to change from default 4 (a – b – c – d) answers, This must be matched to the Question Bank in use: If the MultiChoices parameter is set to 4 you should be using a Question Bank with 4 answers to each question etc.

*Pre-2003 Fix:

This relates to a 'Object Reference Library' issue existing for computers using Excel version (Excel 2002) or lower. Due to an apparent oversight by Microsoft, some functionality is not backwards compatible between the later Excel version 11 (Excel 2003) and earlier versions, causing an error when Word is accessed.

QED SetUp screen cont

Housekeeping drop-down

Housekeeping
Refresh Totals
Set New Exam
Save Current Exam
Select Exam
Help

Refresh Totals Refresh Question Bank Codes totals on SetUp screen.
Set New Exam Create a new exam (see **Creating an Exam**).
Save Current Exam Save the currently selected exam. Note an Exam is not automatically saved after being created. (option disabled in demo version)
Select Exam: Select an exam from the dialog. A total of 20 exams can be saved.
Help Open the QED help file.

Management drop-down

Management
Import Data
BackUp Data
Reconstitute Codes
New Test Sample
Show Data

Import Data Copy an entire dataset from another QED module. Specify filename when prompted ('qedXX.xls'). All QuestionBank, Exam and SetUp data will be imported into the current software version.
BackUp Click to create a safety copy of the current file with a specified name.
Reconstitute Codes This option clears all code data on the SetUp screen and reconstitutes it from the current Question Bank data. The descriptions applied to a code will be the FIRST ones encountered in the Subject / sub-Section columns of the Question Bank screen. Note that sub-Section Max values will need manually re-writing after this operation.
New Test Sample New student Exam dialog under test.
Show Data Show hidden **Exams** and **Data** screens. (Saving the qed module will automatically re-hide these).

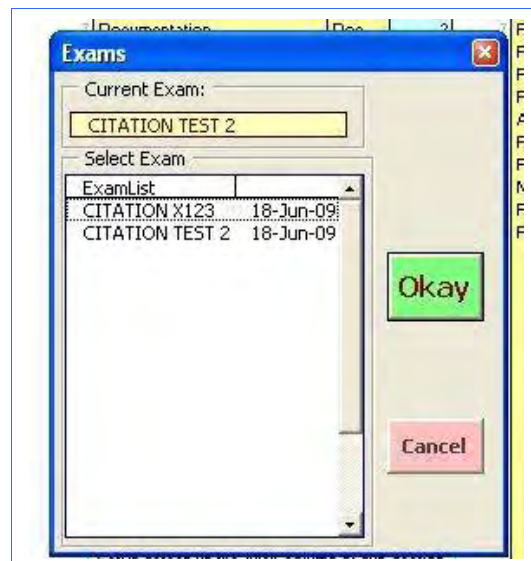
Subjects and subSections boxes contain the current definitions for these items and any changes made will globally affect the program. Be aware that if a code is manually deleted the 'refresh Totals should be run again to reset data.

Note that the Maximum number of subSection questions are individually defined in the right hand ('Max') column of the subSection box. The values specified here are applied to New Exams.

When creating an exam, the subSection questions are limited within a subject to the maximum specified in the 'Max' column.

SetUp screen – Exam List

Click Housekeeping - [Select Exam](#)



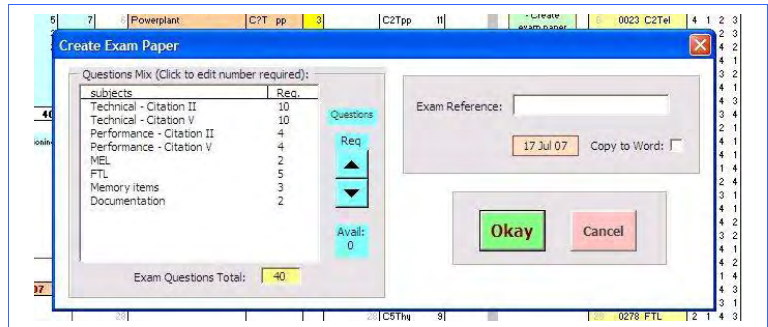
Creating an exam

Click **Set New Exam** (Housekeeping option) from either the **QuestionBank** or **SetUp** screens:

Set New Exam dialog:

Change the number of questions as required by highlighting a subject and using the up/down spin arrow to amend the total required for that subject.

Below the spin control is a note of the total questions available to that subject.



Version 3: A note of the current 'MultiChoices' parameter is presented on the Set New Exam dialog. If necessary, change this as required on the SetUp screen before creating a New Exam.

If 'Print to Word' is selected on the SetUp screen the **Copy 2 Word** checkbox will be active. Click this to create a formatted Word (.doc) file of the exam paper plus a separate Word (.doc) answers file.

Click **Okay** to randomly generate the examination question list according to the mix specified (note that the questions will be grouped by subjects according to the order specified on the **subjects** list on the SetUp screen).

Once an exam has been created, it becomes the 'Current Exam' and its contents can be viewed on the **Questions** and **Answers** screens. If Word is selected, then the exam will also exist as two separate Word.doc files. Be aware the Word files are not automatically saved. The user should check them and re-format as required and then save the files with dedicated filenames.

When an exam is saved it is the tabular breakdown of questions which is saved as per the example on the right.

For example, Question 1 is Question number 125 on the database and the order of answers has been arranged so that the correct answer (number 1) is option 'b'.

Current Exam Stats						CVF342		
QuestionList						Question		
36	No	Question	Code	a	b	c	d	Breakdow
1	0125	C2Tfc		3	1	2	4	C2Tfc
2	0133	C2Tmi		2	4	1	3	C2Tmi
3	0127	C2Tfc		1	3	4	2	C2Tir
4	0075	C2Tir		1	2	3	4	C2Tli
5	0030	C2Tli		1	3	4	2	C2Tel
6	0013	C2Tel		2	4	3	1	C2Tlg
7	0119	C2Tlg		4	3	1	2	C2Thy
8	0002	C2Tir		3	2	1	4	C5Tel
9	0103	C2Thy		3	2	4	1	C5Tli
10	0135	C2Tmi		3	4	1	2	C5Tis
11	0251	C5Tel		2	3	1	4	C5Tir



MGAsoftware.com Examination Ref: CITATION TEST 2

Question 1 Technical - Citation II

If crossfeed has been selected and main DC electrical power is lost (battery switch in EMER with a dual generator failure):

- The system will remain in crossfeed.
- The crossfeed valves will self-close.
- The motive flow solenoid valve will fail open.
- Both boost pumps will be energized to terminate crossfeed.

Question 2 Technical - Citation II

The aileron trim tab is operated by:

- A hydraulically operated trim tab motor.
- Changing the angle of the aileron "fence".
- An electrically operated trim tab motor.
- A mechanical trim knob on the throttle control quadrant.

Question 3 Technical - Citation II

The MASTER WARNING lights:

- Will illuminate from ARM light illuminates while in flight.
- Will illuminate if the HYD PRESS ON light remains illuminated after the DEPLOY light is illuminated.
- Will illuminate from DEPLOY light illuminates in flight.
- Have nothing to do with the reverse system.

Question 4 Technical - Citation II

When the emergency brakes are used:

- The EMER BRAKE PULL levers should be pumped in order to build up sufficient pressure to stop the airplane.
- The normal toe brakes must also be applied to allow the bottle pressure to reach the brakes.
- Differential braking is not available.
- Braking action will be insufficient if the gear has been extended pneumatically since that process will exhaust the bottle pressure.

Question 5 Technical - Citation IV

Regarding the engine starting sequence (battery start on the ground):

- The boost pumps and ignition switches must both be in the ON position before the start button is depressed.
- It is normally terminated by the pilot with the STARTER DISENGAGE button.
- A minimum of 50% N2 is required on the operating engine prior to starting the second engine.
- It is terminated normally by the speed sensing switch on the starter gear motor.

Question 6 Technical - Citation IV

The wheel brakes:

- Are totally independent of the open center airplane hydraulic system.
- Will be inoperative with a HYD LOW LEVEL light illuminated.
- Use a different type of approved fluid than that used by the airplane hydraulic system.
- Must be applied with the emergency system if a HYD LOW LEVEL light is illuminated.

Generating a large volume of Question and Answer data can represent an onerous task. If your examination resources already exist in any digital medium (eg. Word doc), MGA can design a transfer interface to migrate it into QED format. We can also perform the data transfer on your behalf. Please contact MGA before embarking upon the time-intensive creation of examination data. We may be able to assist.

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Exam Ref: Xray2

		a	b	c	d
Question 1	b		X		
Question 2	a	X			
Question 3	d				X
Question 4	b		X		
Question 5	d				X
Question 6	b		X		
Question 7	b		X		
Question 8	a	X			
Question 9	d				X
Question 10	a	X			
Question 11	d				X
Question 12	b		X		
Question 13	b		X		
Question 14	d				X
Question 15	d				X
Question 16	d				X
Question 17	c			X	
Question 18	b		X		
Question 19	d				X
Question 20	d				X
Question 21	b		X		
Question 22	b		X		
Question 23	d				X
Question 24	b		X		
Question 25	c			X	
Question 26	b		X		
Question 27	d				X
Question 28	b		X		
Question 29	c			X	
Question 30	d				X
Question 31	c			X	
Question 32	c			X	
Question 33	c			X	
Question 34	a	X			
Question 35	c			X	
Question 36	c			X	

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Exam Ref: Xray2

	a	b	c	d
Question 1				
Question 2				
Question 3				
Question 4				
Question 5				
Question 6				
Question 7				
Question 8				
Question 9				
Question 10				
Question 11				
Question 12				
Question 13				
Question 14				
Question 15				
Question 16				
Question 17				
Question 18				
Question 19				
Question 20				
Question 21				
Question 22				
Question 23				
Question 24				
Question 25				
Question 26				
Question 27				
Question 28				
Question 29				
Question 30				
Question 31				
Question 32				
Question 33				
Question 34				
Question 35				
Question 36				

The examiner and student pro-Forma's are laid out with the same dimensions. This allows the examiners answer grid to be rendered on a transparency and laid on top of the students answer sheet for quick marking methodology.

Answer sheets shown for 4 multi-choice exams. QED v3.0 can also be configured for 3 mutli-choice options in which case columns a, b and c only are printed.

QEDconvert

qedConvert is a support utility for converting Questions and Answer data existing in Microsoft word format into a format usable by QED. It has been designed to input from a typical word.doc layout but if this is not compatible with your layout, MGA will be happy to discuss tailoring this module to suit customer specifics as required.

qedConverter has 3 screens:

- QuestionBank** Same layout as in the QED module; this screen is for Converted text.
- copiedFromDoc** Transit screen and work area. As its name implies, the source text from a Word.doc file is first transferred (via 'cut and paste') into this screen.
- SetUp** Conversion macros are called from here.

The SetUp screen

qedConvert Utility to convert questions and answers from DOC to QED format.

Stage 1 - pasted into copiedFromDoc

16.1 Fundamentals

1. The OTTO Cycle contains which of the following:

a. 4 strokes

b. 2 strokes

c. 4 cycles

Stage 2 - before Prog B is run (see instructions below)

NBC16.1 Fundamentals

1. The OTTO Cycle contains which of the following:

a. 4 strokes 1

b. 2 strokes

c. 4 cycles

qedConvert requires: 1) the correct answer to be identified eg: as above right, the row with the correct answer is flagged in the next available column.
2) the subSection text to be uniquely defined. eg '16.1' above left has the prefix 'NBC' above right so the program cannot confuse it with Question 16.

Stage 3 - QuestionBank format, ready to use. (Note if there are only 3 answer options, the final 'Incorrect' column is blank)

Ref	subject	Sub Secti	code	Question	Correct	Incorrect	Incorrect	Incorrect
0001	Piston E	16.1	Fur	PEN16.1	The OTTO Cycle contain	4 strokes	2 strokes	4 cycles

To use:

- Click **Reset** to Clear Down the sheet **copiedFromDoc** and optionally Clear Down the output sheet **QuestionBank**
- Copy the entire question and answer area from the word document and paste it at Cell A1 on sheet **copiedFromDoc**
- Click **A** - this routine will unwrap any wrapped lines and remove all blank lines from the Question and Answer area.
- Perform these manual edits on the **copiedFromDoc** sheet:-
Edit subSection headers to have a unique prefix identifiable to the conversion program (eg the 'NBC' prefix above).
(Tip: use CTRL-H to Find and Replace each instance of (eg above) '16.' - taking care not to modify valid data)
Identify the row containing the correct answer with a '1' in the next available column (this is column B on the sheet).
Important: QED requires the correct answer to be in the column labeled 'Correct' on **QuestionBank** sheet.
Note no validation is made of these changes. Contact MGA if the conversion program fails during this process.
- Click **B** - this routine will confirm or write the stats below before completing the conversion process
- Everything OK? Click **C** to complete conversion process.

Stats:

userName: MGA software.com
subject: Piston Engines
subjectCode: PEN
multiChoice: 3
subSectionPrefix: NBC
Questions: 20
subSects = 4 (auto)

This session of Questions will be grouped under this subject heading
This session of Questions will be assigned this 3 character Subject Code. (3 or 4)
The unique prefix you have manually applied to flag sub Section headers.
Total number of questions in this session.

Reset

A

B

C

copiedFromDoc screen

When first pasted from Microsoft Word, the text might look something like the text at right.

(pic shows the button A prompt)

16.1 Fundamentals

1. The OTTO Cycle contains which of the following:

a. 4 strokes

b. 2 strokes

c. 4 cycles

2. The firm

a. 1

b. 1

c. 3

3. Which of the following engine types provides the best power to weight

NBC1

This process will:

- Unwrap Lines that word has wrapped, prompting you at each so you can note the affected lines and check them later.
- Remove all Blank Lines.

OK **Cancel**

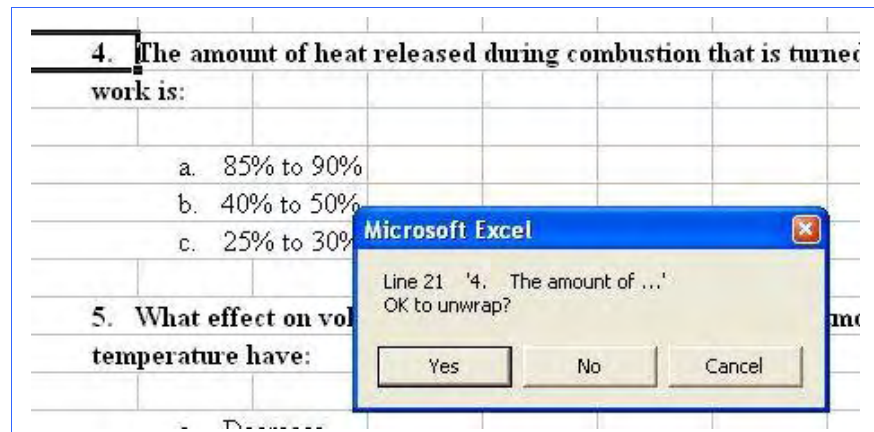
QEDconvert cont.

Using QEDconvert:

- 1 Go to the **SetUp** screen.
- 2 Click the **Reset** button to clear down any existing data on the **copiedFromDoc** sheet. This function also gives you the option to clear down **QuestionBank** data. Do not exercise this option if you are in the process of creating a library of QuestionBank data from several sources.
- 3 Open up your source application (eg. Word), and the file containing your examination data.
- 4 Select the entire area of questions and answers in the word document and, while highlighted, execute the copy command ('Copy' from the Edit menu OR Right-Click and select 'Copy' from the menu OR from the keyboard, CTRL-C)
- 5 Go back to the Excel file **qedConvert** and select the sheet **copiedFromDoc**.
- 6 Place the cursor in cell A1 (top left) and execute the paste command to paste the text from the Clipboard ('Paste' from the Edit menu OR Right-Click and 'Paste' OR from the keyboard, CTRL-V)
- 7 Go to the **SetUp** screen

- 8 Click button A - this routine will unwrap any wrapped lines and remove all blank lines from the Question and Answer area.

At each wrapped line, you will be prompted to confirm the unwrap.



- 9 Go to the **copiedFromDoc** sheet. Check that each line contains only exam data: Either a section header, a Question, or answer option.

Now carefully perform the following TWO manual edit jobs:-

- 1) Edit any ambiguous subSection headers so that they are uniquely identifiable to the conversion program. For example if subSections headers are numeric, the program will not be able to discriminate between them and Question Numbers. We suggest adding a dedicated prefix to the front of the number (eg the 'NBC' prefix in the example). To locate all the instances of a particular header, use the Excel function CTRL-H to Find and Replace each one - taking care not to modify valid data.
- 2) Identify the row containing the correct answer and flag it with a '1' in the next available column to the right. (As all the data is in column A of the sheet, this will be column B). Remember that for QED to work, it must have the correct answer in the appropriate column on the QuestionBank sheet.

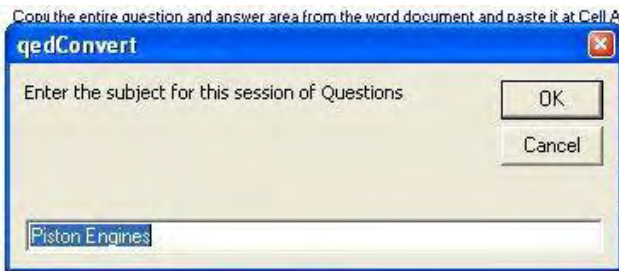
A	B
NBC16.1 Fundamentals	
1. The OTTO Cycle contains which of the following:	
a. 4 strokes	1
b. 2 strokes	
c. 4 cycles	

Be aware that no validation is made of these editing changes. Check carefully before proceeding.

QEDconvert cont.

10 Click button **B** - this calls up a routine to confirm or write the stats required.

2) Copy the entire question and answer area from the word document and paste it at Cell A1 or
3)
4)



5)
6)

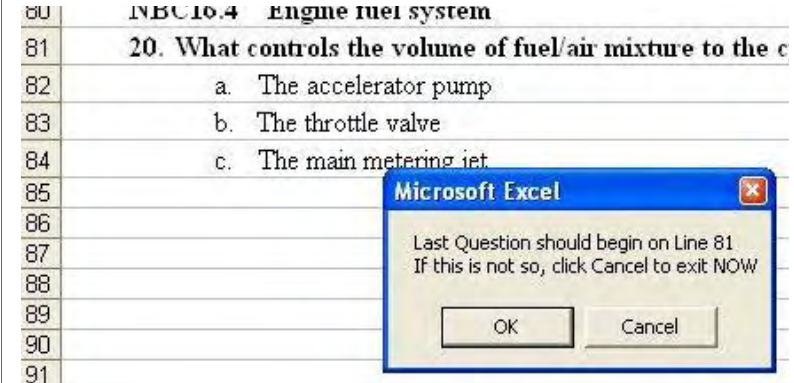
Stats:

userName:	MGA software.com	
subject:	Piston Engines	This session of Questions will be grouped un
subjectCode:	PEN	This session of Questions will be assigned th
multiChoice:	3	(3 or 4)
subSectionPrefix:	NBC	The unique prefix you have manually applied to
Questions:	20	Total number of questions in this session.

11 If everything looks okay, click button **C** to complete the conversion process.

Fig C

The button C process counts the number of headers (conforming to the specified unique text), and runs a maths check on the number of questions factored against MultiChoice options. The logic will prompt you with the calculated line on which the LAST question should lie, and position the screen so that you can visually check that this the case before proceeding..



During the conversion, Questions are added to the QuestionBank screen and at the same time, Subject and subSection codes are added or updated. In order to compose a library combining several doc files of exam data, do not clear down the QuestionBank screen between successive conversions.

Once complete, the QuestionBank data (including associated Subject and subSection codes) may be imported into QED ready for use in generating examinations. (see 'Import Data' - Management drop-down option – QED SetUp screen).

'Index Questions and Answers' utility: (button on the SetUp screen)

Use this procedure with a raw question and answer list. This routine will supply question numbers plus 'a, b, c, d' flags at the start of answer lines.

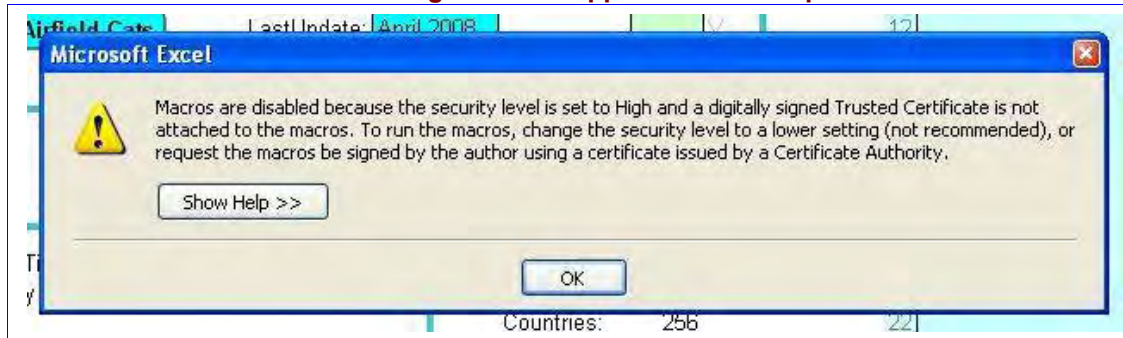
Contact MGA if the conversion program fails for no obvious reasons after following these instructions.

Enabling macros on First Run

MGA software uses program codes called 'macros'. For these to run, Excel's Security Settings may require changing to enable macros (by default macros are disabled). When MGA software is first run you will get an error message if macros are not enabled.

In pre-Excel 2007 versions:

If a message like this appears on start-up:



Click **Tools | Macros | Security ...** select **medium** or **low** security level:

Security Level settings in pre-2007 Excel

If set to **High** or **Very High**, MGA software will not run.

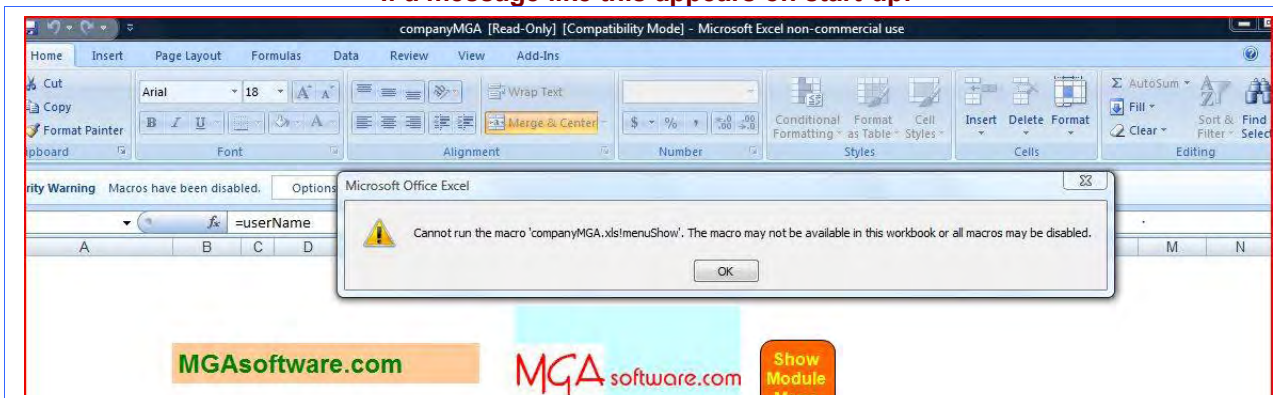
If set to **Medium**, a warning (*'macros can contain viruses'*) will appear every time MGA software is run.

Click the **'Enable Macros'** option - MGA software contains no harmful code.

If set to **Low**, MGA software will run without interruption

In Excel 2007 version:

If a message like this appears on start-up:



Click **Excel Options | Trust Center** then either

- 1 Click **Trust Center Settings | Macro Settings ...** click **enable macros** OR
- 2 Click **Add a trusted location ...** specify the MGA folder as a trusted location.

The second option is safer as it will add permission for MGA files only whereas the first option will globally enable macros.

Versions & upgrades

MGAsoftware.com will alert you whenever a substantive revision of your software is available for release. Your current software version number can be checked on the **SetUp** screen of the module you use. When software is distributed the version number is appended to the module name (as a whole number) for example: **qed22.xls** identifies software for **qed** version **2.2**.

To implement an upgrade

1. Make a safety backup of your existing program file.
2. Make sure the downloaded (or emailed) software is resident in the correct folder and...
3. Run the new file you have received from MGA. From the **SetUp** screen click the **Import Data** function (may be a button or Management drop-down option).
A prompt appears: 'Copy in data from filename:'
Enter the name of the file that contains your data and click **Okay**.
4. At the prompt 'Data copied successfully, Now Save as ... ?'
Confirm the filename and click **Okay**. The upgrade is now completed.

Installation

1. Copy the Excel workbook files supplied by MGA into a suitable folder on your computer.
2. Open Microsoft Excel, navigate to your chosen folder and open the MGA module (eg: 'iBank.xls').

Disclaimer: Some MGA modules may be distributed with time-related validities (details will be published on the SetUp page). If the validity of your software is time related, MGA Software is not responsible for any consequences arising from the use of its software after expiry date.

For all technical queries contact MGA

Tel: +44 (0) 7791 466201 or email desk@MGAsoftware.com

If you have any requirements for software be aware we are happy to investigate the feasibility of bespoke software to your specifics. If it's possible for the job to be automated then we can do it!



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