



In academic
affiliation with



GULF COLLEGE – MUSCAT – SULTANATE OF OMAN

UNDERGRADUATE BUSINESS PROGRAMME

ACADEMIC YEAR: 2016-2017

First Semester

ASSIGNMENT

Module Title: Business Skills 2	
Module Code: BLB10115 – 4	
Method of Assessment : Business Maths Assignment	
Weighting: 50%	Module Credits: 15
Level: 4	Semester/Teaching block: 2
Morning/Evening Session: Both	Examiner: Mrs Mradula
Additional Information (if any):	

Module Title: Business skills 2

Module Code: BLB10115 - 4

Module Leader: Dr. Rodrigo M. Velasco

Weighting: 50%

Submission Time and Date: 4th to 6th of June 2017

You should hand in **one** copy of your assignment by the time and date mentioned above to the appropriate 'hand-in location' at the Gulf College. Fill in the front cover (staple together with your assignment). **MAKE SURE** that you fill in all the relevant details on this form. An acknowledgement will be given to you upon receiving your assignment. This is your receipt, **keep it**. You can submit work by post, but you must send it recorded delivery, it must be postmarked two days before the deadline date and a copy must be kept by you in case it is lost in the post. Faxed assignments will **not** be accepted.

Assignments **must** be submitted by the due date. The only circumstance in which assignments can be submitted late is if an extenuating circumstances form is submitted at the same time. In these circumstances work may be submitted up to 5 days late only. If the extenuating circumstances are upheld, the assignment will be graded; otherwise a 0 will be awarded.

Note: The assignment should be written in pen only except for the graphs which are to be drawn in pencil.

This assignment will assess learning outcome:

LO2 CALCULATE AND APPLY A RANGE OF QUANTITATIVE TECHNIQUES TO SOLVE BUSINESS PROBLEMS

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Business Skills – II (BLB10115-4)
Business Maths Assignment
2016 – 2017 (First Semester)

ANSWER THE FOLLOWING QUESTIONS IN PEN SHOWING ALL APPROPRIATE WORKINGS AND FORMULAS WHEREVER REQUIRED IN THE SPACES PROVIDED AND MAKING INDICATIONS ON GRAPHS WHERE READINGS HAVE BEEN TAKEN.

1. In order to determine the awardee for the month, the manager shortlisted four employees and obtained records pertaining to their performances. The following data were extracted from the records.

Employee	Days in duty	Total sales (OMR)	Standard deviation
A	30	620	5
B	25	570	7
C	27	765	10
D	29	453	3

- a) Find the combined average sales of all the employees.

5

- b) Calculate the coefficient of variations of each employee.

3

- c) Which employee deserves to be the awardee for the month in terms of greater consistency in performance?

2

Employee	Days in duty	Total units (C/7)	Standard deviation
A	30	850	8
B	25	870	7

2. The production manager correlated the hours of work with the number of production output in the electronics department. The coefficient of correlation between the hours of work and production output is 0.74. The average production hour is 6 hours while the production output is 100 units. The standard deviations are 11 and 17, respectively.

- a) Find the two regression equations

4

b) Calculate the production hours for a total output of 300 units.

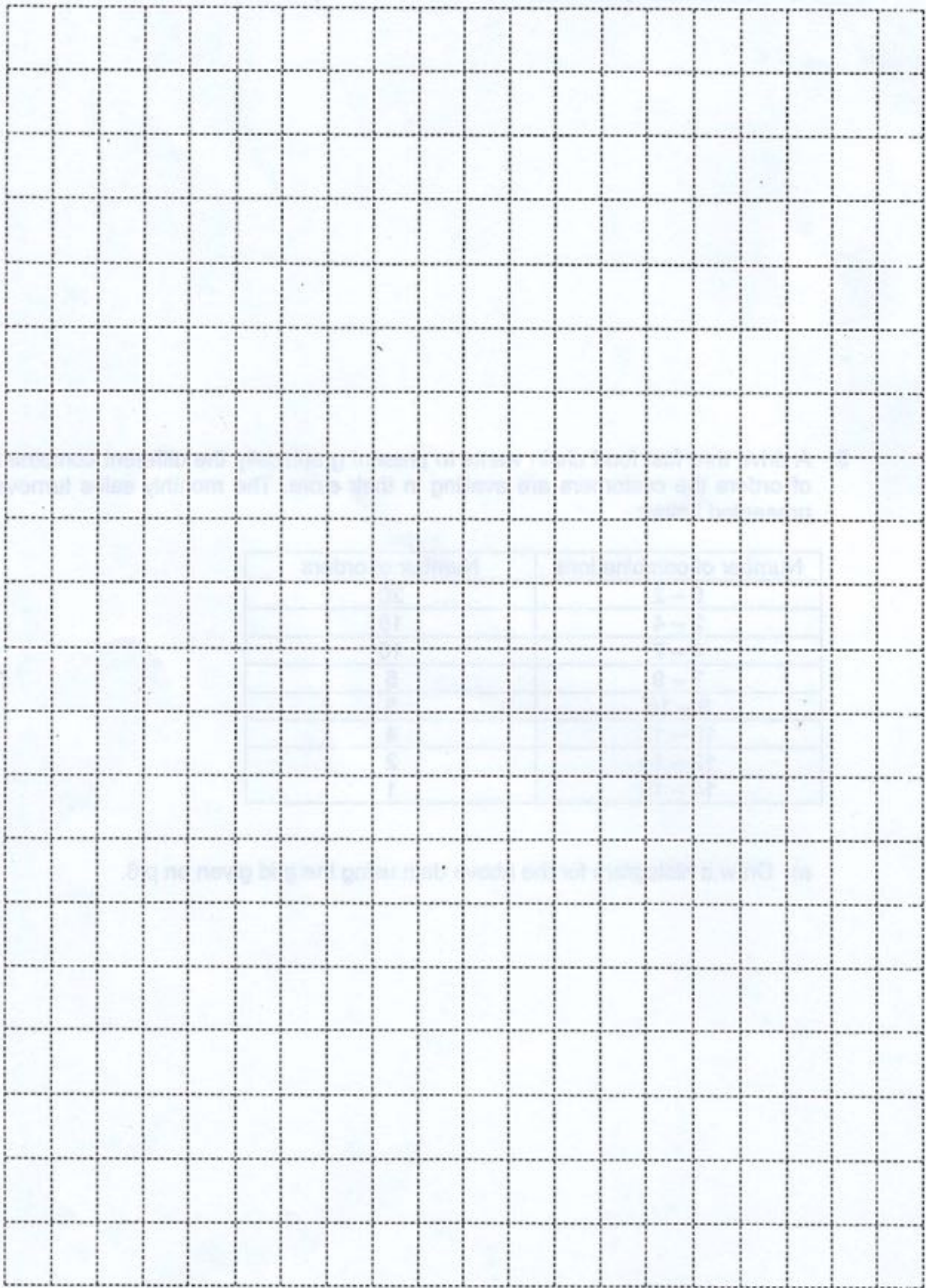
2

3. A drive thru fast food chain wants to present graphically the different combinations of orders the customers are availing in their store. The monthly sales turnover is presented below:

Number of combinations	Number of orders
0 – 2	20
2 – 4	15
4 – 7	10
7 – 9	5
9 – 10	3
10 – 12	4
12 – 14	2
14 – 15	1

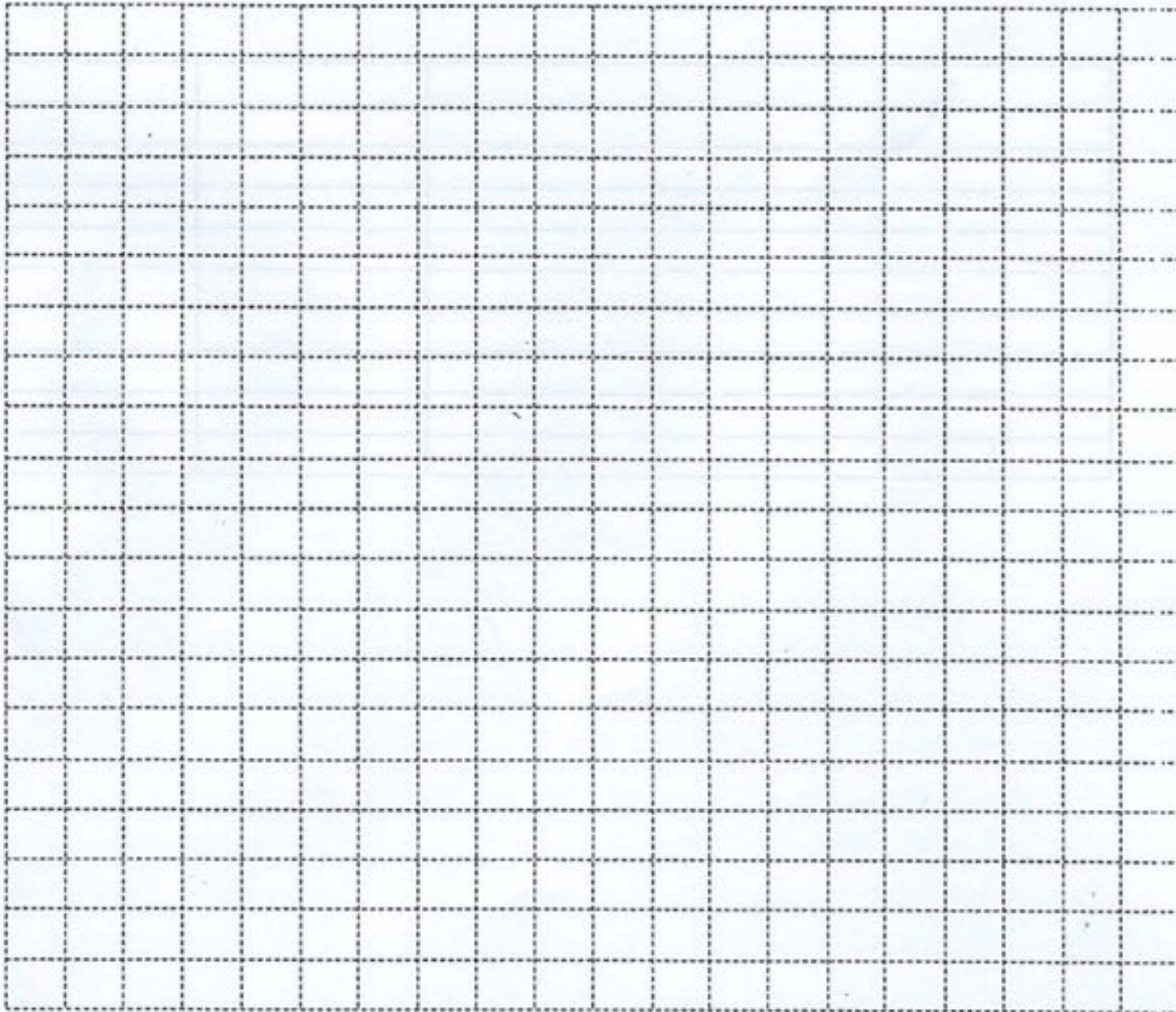
- a) Draw a histogram for the above data using the grid given on p.6.

4



b) Draw less than cumulative frequency curves for the data in question no. 3 using the grid below

4



Use the cumulative frequency graph to estimate the following measures.

Lower Quartile _____

Upper Quartile _____

Median _____

18th Percentile _____

Inter Quartile Range _____

Number of orders within the 7 to 11 combinations _____

6

C) Estimate the mean and standard deviation from the above frequency table (data in question 3) showing all workings.

7

4.

a) An Aldo pairs of shoes originally selling at OMR34.500 is now selling at OMR19.250.

i) What is the percentage decrease in price?

4

ii) If a customer buys 5 pairs of shoes, how much is the savings?

b) A common share is now appraised at OMR3.750. Based on the prevailing market values, it is increased by 15%.

i) Find the original price of the common share

4

c) Calculate the gain on sales, if 300 shares were sold.

5. a) There are 20 participants in a collegiate quiz show. Of the 20 participants, 12 are female, 6 are taking business management, 9 are full time students and 15 are company sponsored. What is the probability that the winner of the quiz show is a male, full time business management student and self-sponsored?

2

- b) Give an example of the following

3

- i) Marginal probability
- ii) Joint probability
- iii) Conditional probability

Plagiarism Warning

Summary

(v)

- Plagiarism occurs if you use somebody else's work in an assignment or exam answer, but fail to state where you got the material from. You need to be also very careful about the amount of words you are using from somebody else's work.
- It can happen in any type of assessment where you are given the questions or tasks in advance.
- If another student uses your work in his/her answer(s), both you and he/she will be punished when caught.
- Punishments for committing plagiarism can be very severe.

The details

Plagiarism is a form of cheating in which students use the work of others and present it as their own. Staffordshire University publishes a fully detailed description of what the term 'plagiarism' means on the University's main web-site under the heading '*Procedures for dealing with suspected cases of academic dishonesty*'. We strongly recommend that you go and read the full document at the above address. Meanwhile, here is an extract of some of the relevant content. You will have committed plagiarism and may be caught, reported and punished (as described below) if you:

- Copy extensively from the work of others (from sources such as books, magazines, journals, web-sites for example) and submit the work as your own. NB It is acceptable to refer to the work of others as long as you do not use too much, and reference your sources properly. If you do not know how to do this, please follow the guidelines given in the document entitled '*Adding quotations and references to your written work*' at this web-site address:
<http://www.staffs.ac.uk/schools/business/bsadmin/staff/s3/jamr.htm>
- Copy another students' work and submit it for assessment under your own name.
- Allow another student to copy *your* work and they then submit it for assessment under *their* name

This last item is of particular importance; few students seem to understand what it means. If, for example, you allow another student to borrow your work and they subsequently copy some of that work and present it as their own, you and they will *both* be punished even though someone else copied your work.

The risks of working with other students

Some assessment tasks are explicitly designed for group work, and it will be made clear that a group answer is expected from you. All other tasks are intended as an assessment of your *individual* comprehension and performance, and group answers are not permitted. In individually assessed forms of assessment your work must be different from that of every other student. Plagiarism can occur in assignments and any

examination where the questions are issued to students in advance. In both cases it is possible for you to ask other people about how best to answer the questions or complete the necessary tasks.

You should be aware that *different modules* and subjects may have *different* requirements. In some subjects, answers to questions may, for example, require every student on a module to employ or refer to the same diagram(s), concepts and the like in order to construct an acceptable answer. You should note, however, that even in these circumstances your explanations of what the diagrams mean, and any other writing referring to any common diagrams and concepts should all be *in your own words*. Moreover, the situation may be very different on other modules, where the submission of work that has a very similar structure, or the use of very similar materials such as concepts, diagrams, quotations and the like, to that of another student, may lead to you being accused of plagiarism.

The picture is complicated and, unfortunately, it is not possible to give advice that is directly relevant to every module you study. If you are unsure about how to avoid plagiarism in any specific module, then rather than hoping and guessing, you should ask for guidance from the member of staff who delivers that module.

Our overall advice is straightforward; by all means discuss how best to answer questions or complete tasks with your colleagues, but when it comes to actually writing your answers - **DO IT ALONE!**

What happens if you get caught?

Examination Boards may punish offending students in any manner that they deem fit. Typical punishments Boards may choose range from reducing grades, making students re-sit modules, through to failing students on a module or an entire award. The University regards this form of cheating as a serious offence. Full details of the range of likely punishments can be found on the University's web-site under the heading '*Procedures for dealing with suspected cases of academic dishonesty*'.

Please consider yourself warned!