

Questions 1 and 2 below, on *Chapters 1* and *2*, form Part I of Tutor-marked Assignment M246 01. The remainder of the TMA (Part II) on *Chapters 3* and *4*, can be found immediately following Questions 1 and 2 in this booklet. Question 1 is marked out of 25 and Question 2 is marked out of 30. Question 3 is marked out of 20 and Question 4 is marked out of 25. The marks for each part of each question are shown in the right-hand margin.

Please send your answers to Questions 1 and 2 to your tutor, along with an assignment form (PT3). Be sure to fill in the Assignment Number on this form as

M246 01.

Your tutor will mark and comment on your solutions to Questions 1 and 2, and will send your script back to you directly to give you some early feedback on the course. He or she will retain your PT3 form in order to enter your marks for Part II of this assignment. The form will then be sent to you via Walton Hall, so that your marks can be recorded.

General advice on TMAs

If a question or a part of a question makes explicit mention of the course software SSC, then you should use SSC to obtain your answer (and you may be asked to include SSC output with your answer). In other cases SSC may be the obvious means to achieve your answer; in other circumstances it may be merely convenient, and you might prefer to use a calculator.

If you wish to include SSC output in your TMA script, or if you are asked to do so, then it is perfectly all right to glue the appropriate fragments of printed material into your script. (This is particularly true for graphical output.) You may prefer instead to provide your own sketches and summaries, and if they are of sufficient accuracy to support the point you wish to make, then this is all right too.

An alternative approach is to provide SSC printed output only, incorporating your own comments, remarks and interpretations using the **#-key**. See the entry on **comment statements** in the *SSC Guide*, in the section called **SSC Reference—Principles and Practice**. Finally, if your system is one that generates a log-file, you can incorporate additional material into the log-file using the SSC editor either from within SSC or using any editor at later occasions, and then submit the completed document.

In any case, none of the TMA questions is intended to require a great deal of writing. **Even parts of questions where you are asked for discussion or explanation or interpretation only expect a response of a few lines, NOT several pages!** You should resist the temptation to include with your script too much evidence of time spent at your keyboard—SSC will tirelessly answer all the questions you put to it. You should only include material to support the point you wish to make.

Question 1 (*Chapter 1 Data*)

- (a) The following data set, arranged in ascending order from the smallest observation to the largest, gives the scores on a standard test for a sample of twelve schoolchildren.

702	740	816	822	850	870
888	894	899	1043	1133	1204

- (i) Using SSC only if you wish to, find the five-figure summary for this data set.
- (ii) Find the lower and upper adjacent values for the data set, and hence sketch a boxplot of the data. *Only a rough sketch is required here, but it*

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