

ST104 Exam 1999: Comments

1. Overall Standard

The overall marks were fairly high.

- This reflects a genuinely high standard—well done.
- The course was compulsory for just 13 students out of the 199 who sat the exam; some students who took the course as an option but expected a relatively low mark presumably voted with their feet before the exam.
- Most remaining students had already scored highly on the 30% assessed component of the course.
- Marks from the past few years are summarised below for comparison:

Year	Total no.	— Number of marks in range —					Mean	5-number summary				
		< 40	40–49	50–59	60–69	> 70						
1996	149	0	2	22	96	29	64.1	44	62	64	68	82
1997	209	1	3	32	120	53	64.9	37	61	66	70	79
1998	163	2	12	46	82	21	61.5	31	57	63	67	80
1999	199	3	2	35	110	49	64.5	34	60	65	69	80

There were, however, some remarkably wayward uses of English and of calculators, see below.

2. English Like What She is Wrote

I only mark statistical content, not grammar & spelling. I am also well aware that I make mistakes in English. The following notes are therefore intended to be helpful & light-hearted, rather than patronising & snotty.

- Please make sure that you know the difference between the words in the following pairs:

affect/effect, compose/comprise, replace/substitute,
imply/infer, feasible/plausible.

For example,

‘rounding to the nearest integer may effect accuracy’

means almost the opposite of what the writer probably meant.

Similarly watch out for its/it’s, whose/who’s, their/there/they’re etc.

- Impress future employers by not writing ‘could of’, ‘should of’, ‘would of’ instead of ‘could have’ etc.
- ‘Byast’ and ‘sudjestid’ were two of the more spectacular examples this year of phonetic (and frenetic) spelling under exam pressure. However, even in assessments, many words (e.g. separate, supersede, susceptible) were more often than not spelled incorrectly.
- **Quiz:** which letters (if any) should be doubled in the following ‘words’:
acomodate, corelation, exagerated, fulfil, necesarily, omision, profesional?

Continued...

3. Possible Future Exam Question (An Example of Preternatural Variation)

A question on Warwick University's 1999 ST104 exam required examinees to calculate a certain test statistic t , whose correct value was 2.3227... Out of 197 students present, 170 attempted the calculation, and reported the following values for t (ordered within students' Departments):

Computer Science

0.149	0.15	0.16	0.444	0.47	0.64	0.9	0.906	0.929	0.9295
0.948	0.9517	1.17	2.115	2.18	2.25	2.264	2.28	2.32	2.32
2.32	2.3228	2.323	2.323	2.323	2.323	2.323	2.323	2.323	2.326
2.33	2.33	2.34	2.361	2.38	2.38	2.383	2.387	2.39	2.4
2.6	2.681	2.91	3.11	3.28	3.675	3.85	4.064	4.43	4.69
5.32	6.489	9.28	9.315	35.55	271.12				

Mathematics

0.017	0.398	0.627	0.686	0.901	0.906	0.959	1.0987	1.27	1.595
1.599	1.76	2.034	2.13	2.2	2.26	2.267	2.32	2.32	2.32
2.32	2.3227	2.3227	2.323	2.323	2.323	2.323	2.326	2.36	2.36
2.38	2.383	2.383	2.383	2.446	2.72	3.97	6.56	6.99	7.15
9.03	35.67								

Statistics

0.1461	0.147	0.149652	0.15	0.175	0.2823	0.364	0.442
0.64	0.7723	0.8523	0.883	0.9021	0.9057	0.9057	0.906
0.91	0.915	0.991866	1.41	1.64	1.654	1.686	1.885
2.117	2.198	2.24	2.2639	2.3	2.32	2.32	2.32
2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32
2.32	2.32	2.32	2.322	2.3227	2.3227	2.3227	2.3227
2.323	2.323	2.323	2.323	2.3312	2.34	2.356	2.37
2.38	2.382	2.383	2.3866	2.426	2.832	3.29	3.446
3.859	4.645	5.3898	7.34	9.04	9.158	9.158	31.9

Using appropriate numerical and graphical summaries, discuss the pattern of reported values for t .

4. Acknowledgements

I am indebted to Tetley's (tea bags) and Spiritualized (Royal Albert Hall), without whom the marking would have rendered me insane.