Question One

Generally caused relatively few problems! One of the skills in some TSA questions is to take a wider perspective, rather than focusing on every individual sentence. Here, the first three sentences give the game away. In the first sentence, it says: Everyone agrees X (i.e. conservation tourism) has worked well in Africa. In the second, it says: Therefore, we should welcome X. In the third it says: Therefore, we should use X in the arctic.

If you step back, you can see that this is a bad argument because lots of things which work well in Africa will not work well in the Arctic.

Question Two

For these questions, as we discussed, the trick is to use "X" and "Y" to find the structure of the argument. Here we have (paraphrased):

If the vice president acted unlawfully here, he would have had to resign.
Since we know he has resigned, he must have acted unlawfully.

(Note that "break the law" and "act unlawfully" are synonyms)

Thus the structure is:

If person did X, then he would have had to Y.
Since it is confirmed that he Y'd, he therefore did X.

Or, if you want to condense it further:

If X, then Y.
Y therefore X.

(Note that the reasoning here is flawed. As I mentioned in class, the argument has the same structure as: If you work hard, you will do well on the test. You did well on the test, therefore you worked well. This argument structure ignores the fact that X is not the only way to get Y; you might have instead cheated on the test, or were lucky that the questions came up. In the example given, we don't know why the vice president resigned; he might have been ill, or bored of his job).

If you look at the options A-E, you will see that A-D all have different structures:

A looks like: If X then Y; not-Y, therefore not-X.
B looks like: If X then Y; you say X, therefore Y.
C looks like: If X then Y; X is impossible, therefore not-Y.
D looks like: If X then Y; not-X, therefore not-Y.

Only E has the right structure: If X ("snake venomous") then Y ("wound inflamed"); confirmation of Y therefore X.

Question Three

Again, it is useful to condense answers into Xs and Ys. Here, the basic principle is that: People often say they want social good X, but object when they are asked to suffer some sacrifice to enact X. This is clearly expressed in the final sentence: "Practise what you preach!"; people should not be hypocritical.

Once you realise this is the principle, it is quite clear that the answer is B. In B, people are asked to make a sacrifice (paying income tax increases) to achieve a social good they say they want (more money spent on health service), which is clearly analogous.

Question Four

Pretty much a brute-force question; you have to work out what the cheapest possible option for each hotel is. One frequent mistake is to forget that Monday comes *after* Sunday!

For the **Grand**, the four cheapest nights will be Friday to Monday, which is (50 + 60 + 60 + 60) = 230 euros. The deal is 3-for-2, so remove one 60 euro night and you get 180 euros.

For the **Majestic**, the four cheapest nights will be Friday to Monday again (40 + 90 + 40 + 40) = 210. The deal is half-price Saturday, so take 45 euros off to get 165 euros.

For the **Palace**, the four cheapest nights will be Friday to Monday again (50 + 90 + 80 + 60) = 280. The deal is half price, so 140 euros.

For the **Palms**, the four cheapest nights will be Thursday to Sunday (50 + 40 + 60 + 50) = 200. The deal is the cheapest night free, so 160 euros.

For the **Plaza**, the four cheapest nights will be Thursday to Sunday (60 + 50 + 70 + 50) = 230, with a 50 euro discount.

Therefore, the answer is C!

Question Five

A deceptive nets question; it looks horrible, but the reasoning is actually very simple.

The cube makes two turns forwards, so it will end up having the triangle face down and the opposite face (the rectangle) visible on top.

It makes two turns sideways, which means the rectangle will now be on the bottom again and its opposite face (the triangle) will be on top.

It then makes two turns forwards, which means the triangle will be on the bottom again, and its opposite face (the rectangle) will be on the top, so the answer is D.

The trick here is to see that if you move a cube in the same direction twice, what used to be the top face will become the bottom and vice versa. Here, it doesn't matter that he moves it sideways twice - because the triangle still ends up on time, and then when he moves it forwards again it changes once more!

Question Six

Lots of text but a relatively simple question. The trick is to just work through the first round options.

If Alex chooses 1 and 8, she will score 7, as the difference between the two numbers. Does Sue have a way to outscore this? Yes, she can choose 9 and 7, whose average is 8, and win.

If Alex chooses 3 and 9, she will score 6. Sue can then choose 6 and 7 to score 6.5 and win

If Alex chooses 6 and 7, she will score 1. Sue can choose any other two numbers and win.

If Alex chooses 7 and 9, she will score 2. Sue can choose lots of other combinations (e.g. 8 and 2, 2 and 4, 5 and 3) to win.

Therefore, the only after left is E, which is correct.

Question Seven

Another brute force question unfortunately.

There are 21 non-Bank holiday weekdays. On these weekdays, it starts at 10.30am and ends at 2.20pm. Each crossing takes 50 minutes, with ten minute stopovers. Therefore, there are four ferries per day (at 10.30am, 11.30am. 12.30pm, 1.30pm). Note that the 1.30pm ferry gets back at 2.20pm, which is when it stops running. 21 x 4 is 84.

There are also ten weekend days and bank holidays. On these days, it runs from 9.30am to 4.10pm. Each crossing takes 50 minutes, with 20 minute stopovers. Therefore, the ferry runs at 9.30am, 10.40am, 11.50am, 1pm, 2.10pm, 3.20pm. Therefore, six ferries. 10 x 6 is 60.

84 + 60 = 144, therefore B.

Question Eight

A very fun one. The trick is to work out who wins and who loses votes overall. Since the first meeting:

James wins 3 votes from Andrew and 1 from Roger; he also loses 2 to Roger. Overall, he wins 2 votes.

Andrew loses 3 votes to James and 5 to Roger. He does not win any. Overall, he loses 8 votes.

Roger loses one vote to James; he also wins 2 from James and 5 from Andrew. Overall, he wins six votes.

The trick with the graphs is quite subtle, and it involves looking at the degree of difference. If you look carefully, you will notice that in C, the margin between James' March and April tallies is 2x slimmer than all the other ones. We know he wins 2 votes, but Graph C shows him winning only one vote. Therefore, C is the answer as it cannot be correct.

Question Nine

As mentioned, this is a rare question which is easier to do with a pen and paper as it allows you to "rule out" incorrect answers by scribbling through them, which makes the table easier to read. Here you can start with the easy criteria: no pre-drilled tap holes (therefore not Gamma), yes to side-grips (therefore not Dalton, Oporto, or Rocca), and correct dimensions (therefore not Polar or Balmoral).

This leaves us with the job of finding the cheapest steel bath and the cheapest acrylic bath. You will quickly see that Carola is the cheapest acrylic bath at £130, while Europa is the cheapest steel bath at £126. The difference is £4, therefore C.

Question Ten

First work out the overall surface area: you don't need to paint the roof. The front will be a nice simple (2.5 x 1) = 2.5 square metres; the back is (2 x 1) = 2 square metres. The two sides will each be: (2 x 1) + 0.5*(0.5 x 1) = 2.25. Therefore, the overall square metreage is 4.5 (for back and front) + 4.5 (for both sides) = 9 square metres.

All sides much be painted three times, so 9 x 3 = 27, and there are two sheds, so 27 x 2 = 54. It takes 4 minutes per square metre, so 54 x 4 = 216. There is also a 20 minute tea break, so 216 + 20 = 236 minutes. In hours, this is four minutes under four hours (which is 240 minutes), so the answer is E.

Question Eleven

Surprisingly tricky and takes quite a long time to see the tricks.

The first thing to do is to see that there are 16 adults (4 teachers, 12 aged 16), and 8 children (those aged 15 years).

The second thing to see is that the "Group Ticket" is a better deal than the supergroup: you only need two under-18s per group and you save $20. Here, we should use the Group Tickets: since there are 24 in our group (of whom 8 are children), we need three Group Tickets: $175 x 3. This is $525. The answer is therefore A.

(You can check this by just showing quickly that buying individual tickets are more expensive: even if the entire group were Children, getting a Group Ticket would still be cheaper than individual tickets).

Question Twelve

A good range of interesting answers from self-defence to "life skills" to finance and very well argued by everyone.

Question Thirteen

A very hard question which we spent a couple of weeks on. The best answers tried to explain that there was a plausible distinction to be drawn on the basis of proximity and ease of rescue, and the possibility that other people might intervene.