Question 2:

You had to find the "justify" any 3 out of below 4 errors

- 1) Class C(line 1): Class B is not public so it cannot be accessed in Class C as it is in different package.
- 2) Class B (line 2): returns pa which is never initialized. This will cause an error when an attempt to access Class A's method will be made.
- 3) Class C (line 3): Anonymous object can not be allocated. (identifier for object required)
- 4) Class C (line 4): Attempt to access protected method of class A(set())

Question 5:

<u>Theorem: 1 is the largest natural number</u>

The objective of this question was to find out the flaw in the proof irrespective of whether theorem is right or wrong. One common mistake was that students had tried to prove how this particular theorem was wrong.

Expected Arguments:

The proof is wrong in assuming there exist a specific natural number (n) that is largest.

The rest of the proof is based on this wrong assumption.

Partial marks for those who have mentioned:

- n^2 <= n is true only for n=1
- Starting with n != 1 and arrive at n=1, So contradiction

Another common mistake some of the students did, was stating $n^2 = n$ as a flaw: $n^2 = n$ is neither a flaw nor an assumption, its logical consequence of the initial assumption of n being the largest natural number.