## Introduction to English for Scientific Communication: Homework 1 Answers

In each sentence below, the place in which "\_\_\_\_\_" appears may require an article. If an article is needed, please write in the appropriate one. If none is needed, please write "none".

1. This appears to be equivalent to <u>the</u> ordinary second quantization formalism.

2. Synchronous activity in <u>the</u> brain seems to be generated and maintained by <u>[none]</u> <u>/ the</u> interactions among <u>[none]</u> neurons.

3. <u>The</u> quantity *h* has <u>an</u> interesting physical interpretation.

4. In <u>[none]</u> Sec. 4, we reduce this set of equations to <u>a</u> system of

[none] simpler equations.

5. In this case, <u>an</u> operator of this kind does not exist.

6. We treat <u>[none]</u>  $\nu$  and *d* as <u>[none]</u> continuous functions and therefore express them as  $\nu(x, t)$  and d(x, t).

7. We plot <u>the</u> coupling strength as <u>a</u> function of *y* in

<u>[none]</u> Fig. 1(a).

8. This type of behaviour is seen with regard to <u>the</u> eigenvector v1 or v2.

9. <u>The</u> shading of <u>the</u> circle positioned at <u>the</u> centre of each cell indicates <u>the</u> population of that cell.

10. In each case, only <u>[none]</u> one pair of <u>[none] / the</u> solutions is stable.

11. This is one of <u>the</u> key concepts in <u>the</u> field of <u>[none]</u> number theory.

12. In this paper, we consider <u>an / the</u> infinitesimal deformation of

<u>a</u> regular arrangement of <u>[none] / the</u> particles.

13. As <u>a</u> result of <u>the / [none]</u> growth of these cells, <u>[none]</u> new structures are formed.

14. We choose <u>[none]</u>  $\hbar \omega_D$  as <u>the</u> energy unit.

15. <u>The</u> above results provide <u>a</u> clear understanding of the resonant behaviour.

16. Most of <u>the</u> change occurs in <u>the</u> first half of the operation.

17. We consider the simple equation  $d \tau (x)/dx = f(x)$ , where

<u>[none]</u> f(x) is <u>the</u> second function appearing in <u>[none]</u> (3.4).

18. In this case it is most convenient to use <u>[none]</u> cylindrical coordinates.

19. This treatment is analogous to <u>the</u> standard algebraic treatment of the harmonic oscillator.

20. One of <u>the</u> main results is given in <u>the</u> next section.