** A level Year 2** Eduqas Component 3

**Homeostasis and the Kidney**

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|  |  | R | A | G |
| 1 | the concept of homeostasis and its importance in maintaining the body in a state of dynamic equilibrium |  |  |  |
| 2 | the role of negative feedback in restoring conditions to their original levels and the role of positive feedback in enhancing the size of a stimulus |  |  |  |
| 3 | the structure of the mammalian kidney and the nephron, including  examination of microscope slides and electron micrographs of kidney |  |  |  |
| 4 | the functions of the mammalian kidney including nitrogenous excretion and water regulation |  |  |  |
| 5 | the adaptations of the cells of the proximal tubule for reabsorption |  |  |  |
| 6 | the contribution of the endocrine glands to homeostatic balance as illustrated by the role of the posterior pituitary gland in the secretion of antidiuretic hormone |  |  |  |
| 7 | the role of antidiuretic hormone |  |  |  |
| 8 | the effects of kidney failure and its potential treatments |  |  |  |
| 9 | the need for different excretory products and adaptations of the loop of Henlé in different environments |  |  |  |

**SPECIFIED PRACTICAL WORK**

Dissection of kidney