

### **B5 Key Word Glossary**

**central nervous system (CNS):** the part of the nervous system where information is processed. It is made up of the brain and spinal cord

**cerebral cortex:** region of the brain associated with consciousness, memory, and language

**cerebellum:** region of the brain concerned with coordinating muscular activity and balance

**ciliary muscles:** muscles that contract and relax to change the shape of the lens of the eye

**coordination centres:** areas that receive and process information from receptors

**effectors:** areas (usually muscles or glands) that bring about responses in the body

**homeostasis:** the regulation of the internal conditions of a cell or organism to maintain optimum conditions for function, in response to internal and external changes

**hyperopia:** long sightedness, where the rays of light from distant objects can be focused clearly on the retina but the rays of light from close objects are not focused and the objects appear blurred

**medulla:** region of the brain concerned with unconscious activities such as controlling the heart rate and breathing rate

**motor neurones:** carry impulses from the central nervous system to the effector organs

**myopia:** short sightedness, where the rays of light from close objects are brought into focus on the retina but distant objects appear blurred as the light is focused in front of the retina

**nerve:** bundle of hundreds or even thousands of neurones

**neurones:** basic cells of the nervous system that carry minute electrical impulses around the body

**receptors:** cells that detect stimuli – changes in the internal or external environment

**reflex arcs:** bring about a reflex action. They involve the sense organ, sensory neurone, relay neurone and motor neurone

**reflexes:** rapid automatic responses of the nervous system that do not involve conscious thought

**sensory neurone:** neurone that carries impulses from the sensory organs to the central nervous system

**stimuli:** changes in the external or internal environment that can be detected by receptors

**suspensory ligaments:** the ligaments that connect the lens of the eye to the ciliary muscles

**ADH:** anti-diuretic hormone helps control the water balance of the body and affects the amount of urine produced by the kidney

**Adrenaline:** hormone that prepares the body for flight or fight

**Auxin:** a plant hormone that controls the responses of plants to light (phototropism) and gravity (gravitropism)

**Contraception:** methods of preventing pregnancy which usually involve preventing the sperm and egg from meeting

**endocrine system:** the glands that produce the hormones that control many aspects of the development and metabolism of the body, and the hormones they produce

**follicle stimulating hormone (FSH):** causes the eggs to mature in the ovary

**gibberellins:** plant hormones that are important in initiating seed germination

**glucagon:** hormone involved in the control of blood sugar levels

**gravitropism:** the response of a plant to gravity

**hormones:** chemicals produced in one area of the body of an organism that have an effect on the functioning of another area of the body. In animals hormones are produced in glands

**insulin:** hormone involved in the control of blood sugar levels

**oestrogen:** female sex hormone that controls the development of secondary sexual characteristics in girls at puberty, and the build-up and maintenance of the uterus lining during the menstrual cycle

**ovaries:** female sex organs that produce eggs and sex hormones

**ovulation:** the release of a mature egg (ovum) from the ovary

**phototropism:** the response of a plant to light, controlled by auxin

**pituitary gland:** endocrine 'master gland' found in the brain that secretes a number of different hormones into the blood in response to different conditions to control other endocrine glands in the body

**testosterone:** the main male sex hormone that controls the male secondary sexual characteristics at puberty and the production of sperm

**tropism:** the responses of plant roots and shoots to environmental stimuli such as light or gravity

**type 1 diabetes:** a disorder where the pancreas fails to produce sufficient insulin

**type 2 diabetes:** a disorder where the body cells no longer respond to the insulin produced by the pancreas

**ADH:** anti-diuretic hormone helps control the water balance of the body and affects the amount of urine produced by the kidney

**Dialysis:** the process of cleansing the blood through a dialysis machine when the kidneys fail

**selective reabsorption:** the process in the kidney where the materials needed in the body such as glucose, some mineral ions, and water are reabsorbed back into the blood from the filtrate

**thermoregulatory centre:** the area of the brain that is sensitive to the temperature of the blood

**vasoconstriction:** the constriction or narrowing of the blood vessels

**vasodilation:** the dilation or opening up of the blood vessels