

Grade Nine Guides

GCSE BIOLOGY

Paper 2

HOMEOSTASIS

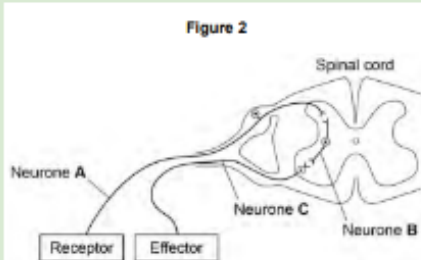
EXAM

QUESTIONS

- **Exam questions per topic**

Aiming at grade 8/9



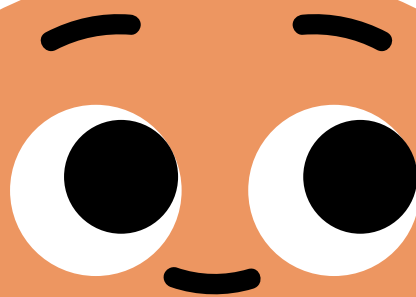
Topic	Question [marks]	Answer
B5: Homeostasis	<p>➤ Compare the structure and mode of action of the two control systems [4]</p> <p>➤ Homeostasis maintains optimal conditions explain what this statement means [4]</p>	•
The human nervous system	<p>➤ Joanna eats a toxic sweet and feels tingling in her mouth and her salivary glands release saliva. describe the pathway of a reflex action. [4]</p> <p>➤ for a reflex question</p> <p>➤ Describe how the structures shown in Figure 2 help to coordinate a reflex action. [6 marks]</p>  <p>➤ When ice cold water is drunk why does the temperature near the brain decrease [2]</p> <p>➤ Required practical: reaction times [6]</p> <p>➤ Give 1 reason why the student shouldn't move</p>	•
The Brain	<p>➤ Name and describe the functions of the brain [3]</p> <p>➤ Describe how scientists study the brain [6]</p> <p>➤ A functional MRI (fMRI) scanner allows a person to move while the scanner makes images of the person's brain activity. Suggest how the fMRI scanner could help</p>	•

	<p>to find out more about the brain damage a person has.</p> <p>➤ Describe how the brain receives information about light entering the eye [3]</p>	
The Eye	<p>➤ Describe how light entering the eye forms images in the brain [2]</p> <p>➤ Explain myopia and hyperopia [6]</p> <p>➤ Explain how the eye changes depending on light levels [5]</p> <p>➤ explain how a Person's eye could adjust to form a clearer image of an Clearera object [6]</p> <p>➤ Describe how spectacle lenses can correct hyperopia [3]</p>	<ul style="list-style-type: none"> •
Control of body temperature	<p>➤ Describe why the skin goes red when warm [2]</p>	<ul style="list-style-type: none"> •
endocrine system + control of blood glucose concentration	<p>➤ Explain how blood glucose levels change after having a high glucose meal [4]</p>	<ul style="list-style-type: none"> •
Maintaining the water nitrogen balance & Kidneys & ADH + Kidney failure	<p>➤ Describe how the blood is controlled by ADH [4]</p> <p>➤ Explain how excess amino acids are excreted safely [4]</p>	<ul style="list-style-type: none"> •
Hormones in human reproduction	<p>➤ How does changes in the uterus lining adapted for fertilisation [2]</p> <p>➤ describe how hormones control the menstrual cycle [5]</p>	<ul style="list-style-type: none"> •
Contraception	<p>➤ evaluate the condom and contraceptive implant [5]</p>	<ul style="list-style-type: none"> •

Plant hormones	<ul style="list-style-type: none"> ➤ how does auxin make a plant grow towards the light [6] → Germination required practical [6] ➤ Explain what happened to the growth of the seedling on side Q compared with the growth on side P. [3] 	<ul style="list-style-type: none"> •

Grade Nine Guides

NO WAFFLE GCSE



Dear student,
Unlike most study guides—
GRADE 9 GUIDES provide
FREE usable essay plans, full
mark responses, organised
exam questions, and
impeccable quote analysis

NO WAFFLE GCSE

Aiming at grade 8/9