| Question Number | Answer | Mark |
|--------------------|--|------|
| 7(a) | B - Eukaryota | |
| | The only correct answer is B | |
| | A is incorrect because the electron micrograph has a nucleus and other membrane bound organelles so must be a eukaryote | |
| | C is incorrect because the electron micrograph has a nucleus and other membrane bound organelles so must be a eukaryote | |
| | D is incorrect because the electron micrograph has a nucleus and other membrane bound organelles so must be a eukaryote | (1) |

| Question Number | Answer | Mark |
|--------------------|--|------|
| 7(b)(i) | C – humidity | |
| | The only correct answer is C | |
| | A is not correct because resistance to infection is a biotic factor | |
| | B is not correct because pathogens are biotic factors | |
| | D is not correct because ocean pH is an abiotic factor but not one relevant to plants and their pathogens | (1) |

| Question Number | Answer | Mark |
|--------------------|--|------|
| 7(b)(ii) | B – global warming | |
| | The only correct answer is B | |
| | A is not correct because increase CO ₂ to 1080 ppm does not decrease photosynthesis | |
| | ${\it C}$ is not correct because increased CO ₂ to 1080 ppm does not increase plant respiration | |
| | D is not correct because increased CO₂ to 1080 ppm does not cause ozone depletion | (1) |

| Question Number | Answer | Additional Guidance | Mark |
|--------------------|---|---|------|
| 7(b)(iii) | An explanation that makes reference to the following • carbon dioxide (is a greenhouse gas and) | | |
| | causes global warming (1) | | |
| | a relevant description of a change in the distribution of ash trees (with increasing CO₂ concentrations) | e.g. an increase to 430 ppm leads to more ash trees in the east or an increase to 1080 ppm leads to more ash trees in the north | |
| | • (because increased CO ₂) would result in a change in the range for <i>H. fraxineus</i> (1) | | |
| | and ash trees will be found in regions without <i>H. fraxineus</i> (1) | | |
| | change in range of { H. fraxineus / ash trees } linked to a relevant aspect of climate change (1) | e.g. temperature increase, change in humidity, change in rainfall patterns | (5) |