| 1 | (a) | The diagram shows the structure of a bacterial cell. A B C | | | | | | | | |
|---|-----|---|---|-----------------------|--|---------------------|------------------|--|--|--|
| | | (i) | On the diagram use work | ox to label structure | uctures A , B and C . | | | | | |
| | | | cell membrane | cell wall | chloroplast | cytoplasm | plasmid | | | |
| | | (ii) Give one difference between the structure of the bacterial cell and an animal cell. | | | | | | | | |
| | | (iii) | Name one structure that animal cell. | is found in a | plant cell but is no | t found in a bacter | (1) ial or an | | | |
| | (b) | Cells | s can be specialised for a | | | | (1) | | | |
| | (6) | | | | | | | | | |
| The diagram shows the structure of a human sperm cell. Mitochondria Long tail | | | | | | | | | | |
| | | Des | cribe how the long tail and | n to do its job. | | | | | | |
| | | Lon | | | | | | | | |
| | | Mitochondria | | | | | | | | |

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(4) (Total 9 marks)

Mark schemes

| 1 | (a) | (i) | A - (cell) wall | 1 |
|---|-----|-------|--|---|
| | | | B - cytoplasm | |
| | | | | 1 |
| | | | C - plasmid | 1 |
| | | (ii) | bacterium cell has cell wall / no nucleus / no mitochondria / plasmids present accept its DNA / genetic material is not enclosed / it has no nuclear | |
| | | | membrane | |
| | | | it = bacterium cell accept converse for animal cell | |
| | | | ignore flagella | 1 |
| | | (iii) | any one from: | 1 |
| | | () | any one none | |
| | | | • chloroplast | |
| | | | ignore chlorophyll | |
| | | | (permanent) vacuole | |
| | | | | 1 |
| | (b) | (Lor | ng tail) moves the sperm / allows the sperm to swim | |
| | | | | 1 |
| | | towa | ards the egg | |
| | | | allow correct reference to other named parts of the female | |
| | | | reproductive system | 1 |
| | | | | 1 |
| | | (Mite | ochondria) release energy (for movement / swimming) | |
| | | | allow supply / produce / provide | 1 |
| | | | | 1 |
| | | in re | espiration | |

[9]