

Question 6.1		Marks
Level 2	A detailed and logical description is given of the stages involved in preparing an agar plate. Logical links are made and scientific terms are used accurately.	3-4
Level 1	Discrete, relevant statements are made. The logic may be unclear and links may not be made.	1-2
	No relevant content	0
Indicative content		Extra Information
<p>Indicative content</p> <p>Pre-inoculation</p> <ul style="list-style-type: none"> • Petri dish and agar sterilised before use • to kill unwanted bacteria • inoculating loop passed through flame / sterile swab • to sterilise / kill (other) bacteria <p>Inoculation</p> <ul style="list-style-type: none"> • loop/swab used to spread/streak bacterium onto agar • lid of Petri dish opened as little as possible • to prevent microbes from air entering <p>Post-inoculation</p> <ul style="list-style-type: none"> • sealed with tape • to prevent microbes from air entering • incubate • to allow growth of bacteria 		<p>Allow other correct methods, eg bacterial lawns</p>
6.2	(disc) B 314.16 / 314.2	1 allow ecf for disc identified by candidate
6.3	some bacteria may be antibiotic resistant may work differently on different bacteria	1 allow E.coli don't cause gonorrhoea

Qu No.		Extra Information	Marks
7.1	protein		1
7.2	(more) magnesium gives more growth / leaves / duckweed	allow less magnesium leads to less growth / leaves / duckweed	1
7.3	A gave highest number of leaves / plants or A gave most growth / duckweed	allow faster / better growth allow more growth with nitrate or less growth without nitrate do not allow 'no' growth without nitrate	1
7.4	Measuring mass. weight or area of <u>all</u> leaves	ignore dry or fresh allow measure length of roots.	1
7.5	Correct explanation for method given, e.g. includes roots / whole plant or leaves vary in size		1