

Question Number	Answer
7 (d)	<p>Answers will be credited according to candidate's deployment of knowledge and understanding of the material in relation to the qualities and skills outlined in the generic mark scheme.</p> <p>The indicative content below is not prescriptive and candidates are not required to include all the material indicated as relevant. Additional content included in the response must be scientific and relevant.</p> <ul style="list-style-type: none"> • description of the table data e.g. comparison of numbers of mosquitoes {killed / survived} • consideration of GM fungus being most effective treatment • consideration that most mosquitoes were resistant to the insecticide used / some were not resistant to insecticide and were killed / inheritance of resistance • consideration that resistance arose due to mutation / natural selection / genetic variation in population • as gene is only {switched on / expressed} when the fungus has infected an <i>Anopheles</i> mosquito • the toxin is only produced when the fungus has infected an <i>Anopheles</i> mosquito • consideration of protein synthesis / detail of the role of rER and Golgi apparatus • evaluation of methodology / limitations of method e.g. mosquitoes escaping, small sample size • consideration of wider effects on biodiversity e.g. toxin will not poison other insects / humans / organisms whereas insecticides would kill other insects / effect on food chains / biodiversity