### Answers for “Cloning” Comprehension (OA2, 2009):

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer(s)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>From Passage A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Paragraph 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 a) “I laughed when Steven Spielberg said that cloning extinct animals was inevitable.” Explain in your own words what “cloning extinct animals was inevitable” means. [2M]</td>
<td>duplicating animals that no longer exist (1) is definitely going to happen (1) Cloning means duplicating. Extinct animals means animals which don’t exist on earth anymore. Inevitable means unavoidable. So, it means duplicating animals which don’t exist on earth anymore is unavoidable and can be done. (Angelina)</td>
<td>Many students answered this wrongly because they missed the part about “explaining in your own words, which cost them dearly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) What is the reason that Hendrik Poinar is “not laughing anymore”? [1M]</td>
<td>it is now possible to clone extinct animals, like the mammoth (1) Hendrik Poinar is not laughing anymore as he found that it is possible to clone mammoths. (Kenta)</td>
<td>Some blindly copied “working out the details only” or “this is going to happen” without stating clearly what exactly “this” is. (quote junhong)</td>
</tr>
<tr>
<td><strong>From Paragraph 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 a) What are the “two fundamental steps involved in cloning a mammoth”? [2M]</td>
<td>are to recover its complete DNA sequence (1) and to express this data in flesh and blood (1)</td>
<td>All answered this effortlessly.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Give one reason why scientists do not think the details to cloning a mammoth is insurmountable. [1M]</td>
<td>there is a new generation of high-speed sequencers (1) or, there is a simple, inexpensive technique for recovering high-quality DNA from mammoth hair (1) One reason why scientists do not think the details are insurmountable is that of a new generation of high-speed sequencers. (Tracey)</td>
<td>Most got this correct but tended to quote 2 answers instead of one. Some didn't understand the word “insurmountable” so they quoted the wrong answer. Some wrote in incomplete sentences which may warrant an reduction in marks.</td>
</tr>
<tr>
<td><strong>From Paragraph 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Explain why turning the data into a real life mammoth is “trickier”. [2M]</td>
<td>It is harder (1 – translating ‘trickier’) because the ancient DNA is far too fragmented to use to create an organism (1) or elephant’s cells were used in lieu of the original mammoth, which is a completely different animal altogether and could cause problems. Turning the data into a real life mammoth is more difficult than recovering its complete DNA sequence. That happens because it’s far too fragmented to use... (Diaz)</td>
<td>Most gave only the 2nd answer but didn't rephrase the word “trickier”, which is the O level requirement. Some quoted the part about the elephant's cells but didn’t answer the question relevantly, instead they copied the paragraph.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Give one reason why the steps taken by the scientists would not guarantee success. [1M]</td>
<td>No one knows, for example, just how to build a mammoth nucleus. (1) or Harvesting an elephant egg is difficult, and bringing a mammoth fetus to term in an elephant womb is fraught with uncertainties. (1) (0 – ‘for harvesting an elephant egg is difficult’ only)</td>
<td>This question is void for students who took the paper and not the re-exam because the question stated Paragraph 4 instead of 3.</td>
</tr>
</tbody>
</table>
### Passage A:

#### From Paragraph 6

5) Give 2 reasons why cloning a mammoth may be unethical in today's world. [2M]  
- It lacks a natural habitat (1) / It can only be kept in a zoo (1)  
- It will be treated like a spectacle/circus show (1) (0 – for curiosity)  

Creating mammoths would thus be unethical because scientists would be creating an exhibit for others to view and observe, but the mammoth itself would be uncomfortable living in a modern habitat.. (Huiying)

Many didn't get the point on it being a curiosity (which MUST be explained and not copied). Students who quoted the research on global warming didn't understand the correct idea of “unethical”.

#### Passage B:

#### From Paragraph 1

6) Why would human cloning be wrong? [2M]  
Scientists are doing it to control nature (1) and get money (1)  

Scientists are cloning human to dominate nature and earning profit. (Zenthel)

Fairly straightforward, many got this correct.

7) The author suggests that cloning humans will be risky. In your own words, what are these risks? [2M]  
- Very ugly and deformed (1 - hideously malformed) and socially handicapped (1 - emotionally damaged) child  
- A children that is physically wrong or hurt internally (Ben Tan)

Many students didn't answer “in your own words”, which meant that they didn't rephrase “emotionally” or “malformed”.

Some missed the correct answer by giving the point about money instead.

#### From Paragraph 4

8) Give a reason how we know that scientists purposely keep truth from the public. [1M]  
We only knew about Dolly's creation when she was already 7 months old (1) (Eric)

(0 for wrong pronoun, 'you' instead of 'we')

Fairly easy question.

Many got this correct but some still quoted wrongly by bringing up the part about scientists who dominated the industry for profit, which had nothing to do with the question.

9) “I've met him and debated with him on TV”. What is the author's stand in this debate? [1M]  
The author's stand is against cloning. (1) (Karabo)

Another straightforward one and many got this correct.

The ones who got this wrong copied the paragraphing instead of reading between the lines and analysing the answer.

10) “Dr Seed declared that he cannot be stopped from human cloning under current US law, and if human cloning laws are changed he will move the work to Mexico.” How does the author view Dr Seed's attitude? [1M]  
The author views Dr Seed as arrogant (Ranitha)

He is arrogant/defiant (1) (0 - positive traits like “persistent” or “determined”, 0 - “stubborn” because it’s too weak an answer)

The answer clearly needed an adjective from the author’s viewpoint.

Students need to read the question carefully in this case.

#### From Paragraph 5

11) Explain in your own words how we know that scientists purposely keep truth from the public. [2M]

The relaxed laws (1 - lax legislation) and...
words why it would be politically acceptable for scientists to talk about human cloning in future. [2M]

large companies' lobbying/impact/effect on the industry (1 -influence of corporations) made it politically acceptable.

they failed to answer “in your own words”.

From Passage A & B:

12) For each of the following words, give one word or short phrase (of not more than seven words) which has the same meaning that the word or phrase has in the passage. [5M]

From Passage A

a) insurmountable (line ) - impossible (0 – difficult)

b) fragmented (line ) - incomplete/ fragile/ damaged/ flawed (0 – broken into pieces, or the suggestion of pieces as it does not reflect the usage of the word in context)

From Passage B

c) legislation (line ) - laws/official guidelines/ regulations (0 for rules because it does not reflect the usage of the word in context)

d) dominated (line ) - controlled/taken over (0 - owned)

e) revelations (line ) - Discoveries/ insight/ results/ revealing truths (0 – truths, because that cannot stand alone in context)

From Passage B:

14. Using your own word as far as possible, summarise from the author’s point of view, why human cloning is wrong, and the problems that affect government, science and the public.

Use the material in Passage B from Paragraphs 1 to 5. Your summary, which must be in continuous writing (not note form), must not be longer than 150 words (not counting the words given to help you to begin).  

I feel strongly that human cloning is wrong because scientists...

Answers (see table below)

Many points are indirect. The way to “get them” is to ask:

1. why is human cloning wrong?
2. What problems affect government?
3. What problems affect science?
4. What problems affect the public?

Go through your points that you underlined and ask yourself – are these problems? Do they show that human cloning is bad? If the answers are a yes, they will be the right ones to pick.

<table>
<thead>
<tr>
<th>No of points</th>
<th>Original</th>
<th>Paraphrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>control nature and get money</td>
<td>manipulate nature and are greedy</td>
</tr>
<tr>
<td>2</td>
<td>pedigree child</td>
<td>genetically altered/unnatural child</td>
</tr>
<tr>
<td>3</td>
<td>risks of a hideously malformed or emotionally damaged child.</td>
<td>The child could be physically and socially handicapped</td>
</tr>
<tr>
<td>4</td>
<td>Huge amounts of money are at stake in human cloning research</td>
<td>A lot of money is used</td>
</tr>
<tr>
<td>5</td>
<td>Teams have announced their aims, many people have</td>
<td>There is nothing stopping people from</td>
</tr>
</tbody>
</table>
come forward with their own eggs, their own adult cells and money | donating their eggs and cells as experiments

6 US still has no laws to prevent human cloning from happening, nor do most other countries of the world. | Many countries have little laws or guidelines for human cloning

7 The result is a secretive network of laboratories working illegally to clone humans because the lack of laws. | There are covert operations to clone humans illegally

8 The British scientist responsible for Dolly admitted to a Parliamentary committee (6 March 1997) that human cloning could be possible in two to three years (after initial vigorous denials by many embryologists). | Scientists lied about the progress of human cloning

9 The news on these cloning experiments exposed the fact that most nations of the world had little or no legislation covering genetic engineering. | Media reports on cloning projects revealed the flaws of weak laws around the world.

10 What's more, governments are unable to come up with solid decisions regarding cloning legislation. | Countries cannot agree on laws to guide human cloning experiments.

11 However, Clinton could not even deliver - his own partial ban was thrown out by Congress. | Suggested regulation in the US was rejected

12 Meanwhile UK Parliament in January 2001 made experimental creation of human clones legal, so long as the embryos were made for medical research and destroyed before implantation. | In the UK, legislation was passed for partial experiments.

13 Scientists further their human cloning projects by purposely keeping truth from the public. | Scientists intentionally hid facts from people.

14 They think the public has no real understanding and so these matters should be kept from the public eye, discussed only by scientists and ethical committees. | They did not trust the people's judgments in these matters, and only their own or ethical committees

15 But these committees are dominated by the industry interested in profit. | Who are part of the companies experimenting for money

16 Dr Seed declared that he cannot be stopped from human cloning | Scientists like Dr Seed are defiant against laws stopping human cloning

17 The lax legislation and influence of corporations will ensure that it is politically acceptable for scientists to come out of the woodwork and talk about these things. | Poor laws and big industry players will make the topic easier for scientists to promote human cloning

I feel strongly that human cloning is wrong because scientists manipulate nature and are greedy. The child would be genetically altered, physically and socially handicapped. A lot of money is used. People are donating their cell and eggs freely. Many countries have little laws or guidelines for human cloning so scientists experiment on human cloning secretly. They lied about the progress of human cloning. Media reports on cloning projects revealed the flaws of weak laws around the world. Countries cannot agree on laws to guide human cloning experiments. Suggested regulation in the US was rejected. In the UK, legislation was passed for partial experiments. Scientists intentionally hid facts from people. They mistrust the people's judgments in these matters, except their own or ethical committees who are part of the companies experimenting for money. Scientists like Dr Seed are defiant against laws stopping human cloning. Poor laws and big industry players will make the human cloning an easy topic to promote.(150 words)